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The identification and analysis of subaggregate groups of outdoor recreation participants by frequency data.

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THE IDENTIFICATION AND ANALYSIS OF SUBAGGREGATE GROUPS OF OUTDOOR RECREATION PARTICIPANTS BY FREQUENCY DATA

By

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INTRODUCTION

Participation in outdoor recreation in Canada has been growing at an unprecedented rate during the postwar years. Using national parks attendance figures as a guideline, attendance measures are rising annually at a rate of nineteen per cent (19%) and one hundred twenty-five per cent (125%) per decade (Bryan, 1972: 248). As these attendance figures continue to rise, for the present unabated, national as well as other park facilities at virtually all levels appear hard-pressed to keep pace with the growing demands placed on them. Crowding conditions occur which limit the satisfaction of the user as well as destroying the resource itself through supra-optimal usage. These conditions tend to drive away the very people for whom public outdoor recreation facilities are provided. It is therefore imperative that research in the field of outdoor recreation remain abreast of current trends and patterns of recreation demand through empirical analysis.

The main objectives of empirical analysis in outdoor recreation literature are two-fold: (1) to add to the accumulation of knowledge through summary statistics, and (2) to improve planning methodologies by making theoretical models operational. (Cicchetti, 1972: 90). Knetsch (1972: 429) and Cicchetti (1973: 7) separate empirical studies within outdoor recreation into three broad areas: site-specific recreation area models, site-specific user recreation models and population-specific models.

Site-specific recreation area models deal with the derivation of demand functions for specific sites i.e. determining use responses to different price levels. (Knetsch,

1972: 429). These user-response-price levels are then used to measure economic benefits of any proposed recreation facility by measuring the time and income savings that the potential users of that facility would receive (Cicchetti, 1972: 90). Clawson (1959), Knetsch (1963), Pearse (1968), Cesario and Knetsch (1970), Kalter and Gosse (1970), Cesario (1969), Cheung (1972) are among the many contributors to this approach.

Site-specific user recreation models (on-site studies) analyze recreation behaviour of persons who engage in an activity or activities at a given site (Ferris, 1963: 444). These types of studies provide valuable information to the recreation manager in the field as well as the central recreation planner that will enable them to plan new facilities and additions to meet the demands and needs of present recreation users. (Cicchetti, 1972: 90). Such authors as Burch and Wenger, Davis (1967), Hendee, Cotton, Marlow and Brockman, Lucas (1964), Stankey (1971), Jubenville (1971), Van Doren and Lentnek (1969) have added considerable knowledge to this area of outdoor recreation literature.

The population-specific approach is generally concerned with the recreational habits of individuals or groups of individuals within an entire population, irrespective of recreation site. The information received offers reasons for non-participation as well as the activities engaged in and frequency of participation. These studies usually attempt to relate differences in participation rates in outdoor recreation activities among populations to various socio-economic and demographic factors. (Proctor, 1960; ORRRC,

1962; and Mueller and Gurin, 1962). Cicchetti (1972, 90; 1973, 12) states that due to the requirement of large sample sizes, there have been few attempts at data gathering. Only a small number of studies have been based upon the large samples that have been collected. Ferris (1963: 446) is of the opinion that the potential contribution of these studies is great when the sample reflects a significant part of the total population. The population-specific modelling approach is the spatial framework utilized in this study.

Within the population-specific approach, little attention has been given to detailed analysis of single activities, frequency of participation and participants themselves. It is therefore the purpose of this study (a) to analyze the extent to which certain subaggregate groups of sampled outdoor recreation participants account for total participation in each of eighteen (18) outdoor recreation activities (contingent upon frequency of participation measures); (b) to determine if these subaggregate groups within each outdoor recreation activity possess distinctive socioeconomic and demographic characteristics and (c) to ascertain if subaggregate group characteristics vary between activities according to socioeconomic and demographic characteristics.

By analyzing participation in outdoor recreation in this manner, this study hopes to (a) add to empirical knowledge in recreation research; (b) offer a basis upon which future modelling techniques may be constructed and (c) open new avenues of approach in the area of participation and demand research.

Scope and Objectives

This study intends to examine participation by a sample of Canadian households in eighteen outdoor recreational activities over a yearly period. The eighteen activities include various types of camping (tent, trailer and pickup), winter outdoor activities (ice skating, skiing, snowmobiling), water-oriented activities (power-boating, canoeing, sailing, fishing), "ubiquitous" activities (driving for pleasure, sightseeing, picnics, bicycling) as well as miscellaneous activities (hunting, visiting a historic site, horseback riding). The participants in these activities (refer to Table 1) are part of a national sample of Canadian households undertaken in 1972 by the National Parks Branch. The sample also includes those persons who did not participate in some or all of the activities mentioned above.

The variables of participation in the eighteen outdoor recreational activities considered to be of importance to this study are the frequency of participation by individuals in each activity and the actual number of participants in each activity. As well as the variables of participation, fourteen (14) socioeconomic and demographic background characteristics of the outdoor recreation participants are examined. These characteristics include age, sex, marital status, city size, income, occupation, education, family cycle, etc. (refer to Table 1).

The general procedure of the study is to segment outdoor recreation participants into decile groups within each activity according to frequency of participation. Each

TABLE 1

VARIABLES UTILIZED WITHIN THE FRAMEWORK OF THIS STUDY

	SOCIOECONOMIC		ACTIVITY
1	Province of Interview	15	Tent Camping
2	Community Size	16	Trailer Camping
3	Sex of Respondent	17	Pickup Camping
4	Total Number in Household	18	Hunting
5	Are There Children Under Age 5 In The Household?	19	Power Boating
		20	Canoeing
6	Are There Children Ages 5 - 12 In the Household?	21	Sailing
		22	Visiting Historic Sites
7	Are There Children Ages 13 - 17 In The Household?	23	Driving For Pleasure
		24	Sightseeing
8	Total Number of Children Under Age 18 At Home	25	Snowskiing
		26	Snowmobiling
9	Marital Status of Respondent	27	Picnicking
10	Occupation of Respondent	28	Walking or Hiking
11	Level of Schooling Reached	29	Ice Skating
12	Age Group of Respondent	30	Horseback Riding
13	Income Group of Head of Household	31	Bicycling
14	Observed Socioeconomic Level	32	Fishing

decile group within a given activity accounts for a certain percentage of the total participation. The decile group accounting for the majority of the recreation participation is chosen by empirical means. The socioeconomic and demographic variables of the participants in this decile group as well as the other decile groups are examined.

It is the objective of this study: (a) to define minority groups of recreationists who account for a majority of total recreation participation (minority/heavy-users); (b) to determine if these minority groups exist within each outdoor recreation activity considered; (c) to identify the minority groups of heavy users by means of socioeconomic and demographic variables.

CHAPTER 1

REVIEW OF LITERATURE

Within recreation research, three types of outdoor recreation modelling approaches exist: (a) the site-specific; (b) the site-specific user and (c) the population-specific or reduced-format model. (Cicchetti, 1972, 1973; Knetsch, 1972; Burdge and Field, 1972). The modelling approach used within this study is the population-specific or reduced-format model. The data from this particular approach offer general trends and patterns concerning the recreation population usually on a national scale. Cicchetti (1972) and Ferris (1963) claim that the most useful data for outdoor recreation research is derived from this type of sampling procedure. The problem with this type of approach concerns the general lack of national samples due to the expense and time involved.

In 1962 the Outdoor Recreation Resources Review Commission (ORRRC), set up by the Department of the Interior, Bureau of Outdoor Recreation collected and reported on a national sample carried out in 1960. Several study reports (22 in all) emanated from the collection of about 4,000 questionnaires. This national sample was again carried out in 1965 and 1970. In 1967, Dr. Jack L. Knetsch, an economist with Resources for the Future and consultant to the National Parks Branch, Department of Indian Affairs and Northern Development, aided in the birth of the first national Canadian sample, undertaken in the same year. National recreation samples in Canada have been carried out yearly

since their inception in 1967. The latest and most sophisticated sample, "CORDS 19728M" (Canadian Outdoor Recreation Demand Survey), consists of 3,956 cases and lists variables concerning participation and non-participation in 18 outdoor recreation activities, reasons for non-participation, frequency of participation (in continuous discrete rather than aggregate form), participation at each of the national parks and historic sites by each participant, as well as socioeconomic and demographic characteristics of all sampled individuals. As a result of these national studies, research in outdoor recreation, especially with the "consumption" school of recreation demand has increased dramatically.

Outdoor recreation demand is generally divided into two schools of thought: the "purist" economic school represented by Clawson and Knetsch, and the "consumption" school. The meaning of demand in the economic sense is the schedule of quantities that will be taken at different prices. (Long, and Barron: 1969, 128). The main problem with this approach is that public recreation facilities are usually provided at minimal or zero prices so that there exists no pricing mechanism in the demand schedule. (Cesario and Knetsch, 1970; Long and Barron, 1969; Dauite, 1963; Fulcher and Burton, 1968; Gosse and Kalter, 1970; Kalter and Gosse, 1970; Knetsch, 1969; Knetsch, 1963; Knetsch, 1972; Kuehn and Brewer, 1968; McLellan and Medrich, 1963; Merewitz, 1966; Norton, 1970; etc.) Economists have attempted to devise demand schedules in outdoor recreation by using travel and related costs as a surrogate for the price mechanism (Clawson and Knetsch, 1966). This surrogate pricing approach is

generally unfeasible due to the difficulty in rationalizing the surrogate price approach in theory, in attempting to actually accumulate data on travel costs, and also attempting to ascertain which travel costs to include. Other economists use a "willingness to pay" function as the surrogate price within the demand equation. This approach relates "what an individual would be willing to pay to use the resources rather than to go without the resource services" (Cesario and Knetsch, 1970; Burt and Marglen, 1962; Merewitz, 1966). This pricing surrogate within recreation demand was primarily brought about due to the interest in cost-benefit analysis and is used to approximate benefit measures for public parks. (Cesario and Knetsch, 1970; Fulcher and Burton, 1968; Knetsch, 1969; Kalter and Gosse, 1970; Long and Barron, 1969; Merewitz, 1966; Norton, 1970; Pearse, 1968; Sickler, 1968; Trice and Wood, 1958; Wennergren and Fullerton, 1972). Unfortunately what an individual indicates as his willingness and what he actually does may be entirely different decisions. According to Lowenthall and Riel (1967: 206), "stated preferences and verbal judgements about hypothetical situations are often known to be reversed or radically changed when reality is confronted." Thus, the weaknesses of the purist economic school of thought within outdoor recreation are evident. A second approach in determining recreation "demand" is the "consumption" method.

The second approach treats participation as a consumption process dependent more upon the socioeconomic and demographic characteristics of the population. Due to the economic difficulties in attempting to relate price

and quantity in demand schedules, the second approach has been the more popular. In this particular approach, participation within a given activity or set of activities may be the result or reflection of an individual's preferences, tastes or habits. The primary implication is that these participation preferences are in part, if not entirely a function of one's socioeconomic and/or life style. (Romsa, 1974: 5). These socioeconomic and demographic variables are used as "indicators" of a more abstract concept which is difficult to operationalize and measure - namely socioeconomic status and life style. (Blalock, 1963: 55). A large number of studies have attempted to isolate and explain these key socioeconomic and demographic variables as indicators of participation in outdoor recreation.

Sociologists in their attempts to explain leisure activity have used occupational prestige as a predictor for leisure activity. (Burdge, 1965). These sociologists include Bishop, 1970; Burch, 1969; Burdge, 1969; Cameron, 1935; Clarke, 1956; Cunningham, Montoye and Metzner, 1968, 1970; Defeé, Schultz and Passewark, 1974; Etzkorn, 1964; Gerstl, 1961; Havighurst and Fiegenbaum, 1959; Reiss, 1961; Reissman, 1961; Stern and Noe, 1973; Thomas, 1956; White, 1955; et cetera. Other sociologists have stated that the primary factor is age (Hoar, 1961), residence patterns (Hendricks, 1971), income (Mather, 1941), education, et cetera. The sociological approach generally uses some single measure of socioeconomic status as a predictor or causal indicator of a stated leisure pattern. The methodological weaknesses

are apparent. Leisure, as well as recreation participation cannot be explained simply by one single variable such as occupation. (Sessoms, 1963). Participation is a multi-faceted phenomenon with various factors coming into play at different times to influence both the decision to recreate and the activity or set of activities chosen. (Romsa, 1974: 12).

Similarly sociologists have found differences between social classes and recreational activities. Certain recreational activities associated with higher social class membership include fencing (Barber, 1957), squash (Kaplan, 1960), golf (Clark, 1956; Reider, 1965; Burdge, 1969), sailing and water-skiing (Burdge, 1969), etc. (Morris, Passewark, and Schultz, 1972: 25).

The study of socioeconomic and demographic indicators in outdoor recreation is related to several disciplines. Geographers, economists, as well as other social scientists use such variables as age, income, occupation, education, stage in family cycle, location of residence, sex, ethnicity, size of community etc. as indicators of outdoor recreation patterns in "demand" analyses (Cicchetti, 1972; Burdge, 1969; Hendricks, 1971; Romsa, 1974; Sessoms, 1963; Proctor, 1960; Mueller and Gurin, 1962; Ranken and Sinden, 1971; Vrancart, 1970; et cetera).

Despite the popularity of the "consumption" approach to recreation demand analysis, several deficiencies exist in the methodology and data collection. These deficiencies must be resolved if we are to gain further insight into outdoor

recreation behaviour. One of the restrictions of consumption studies is their areal restriction. With the exception of a few population-specific studies introduced by ORRRC and CORDS surveys, outdoor recreation research is generally restricted to the study of participation on a limited scale: usually at a finite number of sites. Consequently socioeconomic parameters that are found to be associated with users at specific sites are used to generalize for a given population. This obviously is not a valid method of analyzing outdoor recreation participation (Romsa, 1975: 4).

Furthermore, Cicchetti (1972) points out that in many previous studies, frequency of participation in activities is measured as an aggregate rather than a discrete continuous variable. Thus frequency of participation as a useful measure of recreation participation is overlooked.

Other researchers (Ferris, 1970; Mercer, 1971) maintain that more emphasis must be placed upon factors which account for an individual's perception and subsequent utilization of recreation opportunities. As perception is influenced by attitudes as well as his experience and value systems, a considerable variation in cognition may exist even among fairly homogeneous socioeconomic groups (Romsa, 1975: 6). For example, the decision to hunt or fish may be a reflection of values obtained from early childhood experiences rather than socioeconomic status (Sofranko and Nolan, 1972; Yoesting and Burkhead, 1973). In addition, Field and O'Leary (1973: 16 - 25) as well as Burch (1969), Meyersohn (1969), Lee (1972), Yancey and Snell (1971) et cetera point out that social aggregate characteristics such as income,

occupation and education, in and of themselves fail to explain differences in frequency of participation. "It should be pointed out that failure of demand studies to explain differential participation among user groups is related to the fact that information is obtained only from participants. Relying solely upon social characteristics treated as aggregate variables compounds the problem." (Field and O'Leary, 1973: 19). They maintain that failure of social aggregate variables to account for the variance of participation is due to the group nature of outdoor recreation. Following the lead offered by Burch (1969), Field and O'Leary include a social group variable which, according to their calculations appears to add a significant amount to the explained variance of outdoor recreation participation when used in conjunction with social aggregate variables. Further substantial research into behavioural research within outdoor recreation will determine if these substantial claims can be corroborated.

As is witnessed, previous outdoor recreation research is handicapped due to deficiences in national sample data, the type of data collected and the mediocre ability of the data to explain participation. Modelling techniques based upon this data using multivariate statistical techniques tend to spurn in-depth studies of individual activities. In addition, the identification of profile parameters which are utilized to predict or project demand is neglected. This study hopes to fill in the methodological gap in present population-specific studies by offering an in-depth analysis of single activities

using frequency of participation and singling out for identification socioeconomic and demographic variables which appear to affect a major user group within outdoor recreation.

CHAPTER 2

HYPOTHESES

The following hypotheses will be tested within this study.

1. There exists a minority group of participants within each of 18 outdoor recreational activities who account for a majority of the total frequency of participation. (defined as minority/heavy-users).

Rationale: Several authors suggest that there exists a small group of outdoor recreation participants who account for a large proportion of total participation. Christensen and Yoesting (1973) divide recreationists into high and low users based upon numbers or variety of activities rather than actual frequency measures within a single activity. Gans (1957) and Sessoms (1963) suggest that there possibly exists a small group of partcipants who account for a majority of the total outdoor recreation participation. This hypothesis has yet to be tested by statistical means.

2. (a) The minority of persons who account for the majority of the total recreation participation possess distinctive socioeconomic and demographic characteristics within a given activity.

Rationale: The use of various socioeconomic and demographic variables as indicators in explaining differences in leisure pursuits as well as outdoor recreation participation

is well acknowledged. Sociologists have found significant differences in leisure pursuits through the use of occupational class (Bishop, 1970; Burch, 1969; Burdge, 1969; Cameron, 1935; Clarke, 1956; Cunningham, Montoye and Metzner, 1968; Defee, Schultz and Passewark, 1974; Etzkorn, 1964; Gerstl, 1961; Havighurst and Fiegenbaum, 1959; Reiss, 1961; Reissman, 1961; Stern and Noe, 1973; Thomas, 1956; White, 1955), age (Hoar, 1961), residence patterns (Hendricks, 1971; Mortens, 1971) as well as income (Mather, 1941), education et cetera. A major weakness in this approach is that a single factor alone is not influential in explaining leisure activity or outdoor recreation (Sessoms, 1963).

Within outdoor recreation, several researchers have used socioeconomic and demographic variables as indicators in attempting to explain outdoor recreation (Cicchetti, 1972; Burdge, 1969; Hendricks, 1971; Mueller and Gurin, 1962; Ranken and Sinden, 1971; Sessoms, 1963; Vrancart, 1970; et cetera). Their past use has been generally accepted without criticism. Within recent literature the use of socioeconomic/demographic variables in predicting or explaining outdoor recreation participation has been questioned on both methodological and logical grounds (Ferris, 1970; Mercer, 1971; Romsa, 1974; Sofranko and Nolan, 1972; Yoesting and Burkhead, 1973; Field and O'Leary, 1973; Burch, 1969; Meyersohn, 1969; Yancey and Snell, 1971). Socioeconomic and demographic characteristics within the confines of this study will be employed as identifiers of the minority/heavy-user groups rather than predictors or indicators of outdoor recreation participation.

2. (b) The minority of participants accounting for the majority of the total recreation participation (i.e. minority/heavy-users) have socioeconomic and demographic characteristics which are not the same as the majority group of participants (i.e. majority/light-users) for each activity.

Rationale: In order to claim that the minority/heavy-user group in hypothesis 2(a) has distinctive background variables, there has to be, of necessity, an alternate group with which to compare these identifying variables. The comparison group for the minority/heavy-users in hypothesis 2(a) is the majority/light-user group for each particular activity.

The hypothesis 2(b) states that the minority/heavy-users possess different socioeconomic/demographic variables than do the majority/light-users within each activity. Significant research has been done in regard to the type of outdoor recreation activity chosen and the influence of socibeconomic/demographic variables in this decision-making process. Similarly social aggregate variables have been used to explain participation/non-participation in several outdoor recreation activities. Yet little corroborative research exists to explain socioeconomic differences based upon frequency of participation groups within a single activity. It would appear logical in assuming that the minority/heavy-users would have (a) more disposable income, (b) a younger age, (c) a better perception of outdoor recreation facilities through a higher education, (d) fewer if any children to inhibit the frequency of participation

et cetera than the majority group who recreate less. Socio-economic/demographic differences may not only appear between the minority/majority groups within, but also between activities, which leads to the next hypothesis.

3. The minority groups that account for the majority of the total outdoor recreation participation do not share the same socioeconomic/demographic characteristics between activities.

Several researchers who have studied the on-site characteristics of participants have found statistical differences in the attitudes and perceptions between outdoor recreation activities. Lucas (1962, 1964) inferred that there were overt differences in attitudes, perceptions and socioeconomic/demographic variables between canoeists and power boaters in the Boundary Water Canoe area of Minnesota. Etzkorn (1964) found definite socioeconomic differences between wilderness and public campground users. Other researchers have also noted differences in socioeconomic/demographic variables between skiers and snowmobilers (Knopp and Tyger, 1973), horseback riders and motorcyclists, et cetera. No research has, as yet, measured differences between activities for frequency groups.

METHODOLOGY

Data

The data considered in this study was derived from a household sample of the Canadian population undertaken in 1972 by the National Parks Branch, Department of Northern and Indian Affairs. (Canadian Outdoor Recreation Demand Study). The 19728M survey (conducted by Canadian Facts, a professional market research organization) consists of a random, stratified sample of 3,956 cases, the level of stratification based upon the degree of urbanization, socio-economic characteristics and size of household. The sample universe includes the entire population of Canada ten years of age and older with the following exceptions: (a) the Northwest Territories and Yukon; (b) the least accessible and most sparsely settled northern areas of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Newfoundland; (c) inmates of institutions, inhabitants of lumber and mining camps; (d) members of the armed forces not living at home; (e) persons living on Indian reservations; (f) transients or others having no regular place of residence. About seven per cent (7%) of the Canadian population falls within these excluded groups.

The data selected for analysis consists of:
(a) participants in eighteen (18) outdoor recreation activities;

(b) the frequency of participation of these participants; (c) and the actual number of activity trips derived from (a) and (b). Fourteen socioeconomic/demographic variables (refer to Table 1) are also considered as profile characteristics for the participants within the eighteen activities.

Analysis of Data

The data used within this section were drawn from the 19728M CORDS survey stored on computer tape. The following steps were followed to locate minority groups of participants accounting for a majority of total recreation participation. (An example of the type of information obtained for one activity, trailer camping, is offered on Table 2). Firstly, the participants within a given activity were segregated from the non-participants. Information dealing with frequency of participation and the number of recreationists who participated in each frequency group was obtained. i.e. 128 individuals indicated they participated once in trailer camping; 39 participated twice; one individual indicated a participation frequency of one-hundred eighty times. The number of activity trips was determined by multiplying across columns (frequency multiplied by the number of individuals in that frequency group). The participants were then segmented into decile groups. Frequency of participation in activity trips for each decile group was tabulated. Reference to Table 3 shows that the first

TABLE 2

AN EXAMPLE OF THE DERIVATION OF ACTIVITY TRIPS USING TRAILER CAMPING*

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	128	=	128
2		39		78
3		30		90
4		27		108
5		17		85
6		13		78
7		9		63
8		6		48
10		19		190
12		12		144
14		3		42
15		6		90
17		1		17
20		8		160
24		1		24
25		2		50
27		1		27
28		1		28
30		6		180
40		4		160
42		1		42
50		1		50
60		2		120
90		2		180
180		1		180
		$\Sigma x = 340$		$\Sigma y = 2,362$

* Derivation of number of Activity Trips was determined by multiplying Frequency of Participation by Number of Participants in Trailer Camping (Across Rows).

SOURCE: CORDS 19728M Survey.

TABLE 3

SEGMENTING PARTICIPANTS IN OUTDOOR RECREATION ACTIVITY "TRAILER CAMPING" BY DECILE GROUPS

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	34	34	1.43	
2	34	34	1.43	2.86
3	34	34	1.43	4.29
4	34	42	1.77	6.06
5	34	71	3.00	9.06
6	34	109	4.61	13.67
7	34	150	6.35	20.02
8	34	234	9.90	29.92
9	34	391	16.55	46.47
10	34	1,262	53.42	99.89
100	340	2,362	99.89	

decile group accounted for 34 activity trips, while the tenth decile group accounted for 1,262 activity trips. The percentage of total recreational participation (in activity trips) was determined for each decile group.

As a result of this type of analysis, the tenth decile is normally the group which accounts for the majority of the recreation participation. In some activities, however, this fact may not necessarily hold. Therefore a decision rule was devised in order to maintain a consistent approach in defining the minority/heavy-users in each activity. The decision rule stated that if the tenth decile within a certain activity did not account for over 50% of the total recreation participation, the minority/heavy-user hypothesis was rejected for that activity. Conversely, if the tenth decile within a certain activity did account for over 50% of the total recreation participation, the minority/heavy-user hypothesis was upheld for that activity. In this manner, activities in which the hypothesis was upheld were separated from other activities where the hypothesis was rejected. Those activities in which the hypothesis was upheld, namely that minority/heavy-users exist, were singled out for further scrutiny.

The socioeconomic/demographic characteristics of the minority/heavy-user groups as well as the majority/light-user groups were drawn from the sample for those activities in which the first hypothesis was upheld. Percentages of distributions for each of these profile characteristics such as age, income, occupation et cetera were computed for

each frequency group within the accepted activities to aid in interpretation. The socioeconomic/demographic variables were then collapsed into three groups: demographic (sex, marital status, age group, community size, province of interview), family cycle (total number in household, children less than 5 years in household, children ages 5 - 12, children ages 13 - 17, total number of children under age 18 years at home) and socioeconomic (occupation of respondent, level of schooling, income of respondent, observed socio-economic level). Hypothesis 2(a), that the minority/heavy-user groups have distinctive socioeconomic/demographic characteristics was tested in conjunction with hypothesis 2(b). In order to test the distinctive nature of the minority/heavy-user groups; a comparison with the majority/light-user groups was made. A series of univariate chi square tests were run between the two frequency groups with respect to the profile characteristics within a given activity. Hypothesis 2(a) was upheld if one profile variable within each of the three collapsed profile groups was significantly different between the two frequency groups for each activity. Similarly, by testing for significance using the univariate chi square test between frequency activity groups using profile characteristics within a given activity the criteria for testing hypothesis 2(a) and 2(b) were treated simultaneously.

The testing procedure for hypothesis 3 was carried out in a similar fashion to that for hypotheses 2(a) and 2(b). Hypothesis 3 states that the minority/heavy-user groups have distinctive characteristics not only within a given activity but also between activities. Each minority/

heavy-user group within an activity was tested between activities using univariate chi square tests. If one profile variable from each of the three collapsed profile groups was found to be statistically different between two minority/heavy-user groups of two different activities, the two activity user groups were statistically different. Significance levels were calculated utilizing the formula $\frac{100}{\frac{n\,(n-1)}{2}}$. For example, if five activity user groups are to be analyzed, ten possible outcomes would result. If a level of significance of 0.10 is required to accept the hypothesis, 9 of the 10 tests between the five activity user groups would have to be significant.

CHAPTER 3

IDENTIFICATION OF MINORITY GROUPS ACCOUNTING FOR A MAJORITY OF THE TOTAL OUTDOOR RECREATION PARTICIPATION

The results of the testing procedure to locate minority/heavy-user groups for each activity are shown in a series of tables. Tables 4 to 21 offer information dealing with frequency of participation, the number of recreationists who participate in each frequency group, and the actual number of activity trips for each activity. The segmenting of participants into decile groups appears in Tables 22 to 39. Table 40 summarizes the eighteen outdoor recreation activities giving the percentage contribution of the last or tenth decile to the total outdoor recreation participation for each activity.

The results of the analysis of the first hypothesis indicate that there exists a minority group which accounts for a majority of the total outdoor recreation participation for six outdoor recreation activities. These activities include: trailer camping, hunting, canoeing, walking or hiking, horseback riding and sailing. These six activities were singled out for further scrutiny and are analyzed in depth in the next two chapters.

A brief description of the above-mentioned series of tables will be offered. The number of participants, frequency of participation and number of derived activity trips within each activity will be discussed first. The

segmenting of participants into decile groups will be described next. An account of the percentage contribution of the last or tenth decile to the total outdoor recreation participation within each activity will conclude this chapter.

Frequency of Participation

The frequency of participation, number of participants and derived number of activity trips for each activity is shown in Tables 4 to 21. (Refer to Appendix A).

The actual number of participants within each activity varied greatly. The activities with the smallest sample sizes included pickup camping (n = 115), sailing (n = 162), snow-skiing (n = 303), trailer camping (n = 340), canoeing (n = 415), hunting (n = 416) and horseback riding (n = 439). Medium-sized outdoor recreation activity samples were: tent camping (n = 763), snowmobiling (n = 740), and power boating (n = 828). Ice skating (n = 1,084), bicycling (n = 1,120), visiting historic sites (n = 1,202), sightseeing (n = 1,211), fishing (n = 1,110), walking or hiking (n = 1,496), picnics or cookouts (n = 1,887), and driving for pleasure (n = 2,107) comprised the largest sample sizes.

The largest (modal) frequency groups within activities appeared to be those persons who participated once. This observation was true for trailer camping (128 out of 340), pickup camping (43 out of 115), hunting (92 out of 416), tent camping (257 out of 763), power boating (156 out of 828), canoeing (109 out of 415), sailing (53 out of 162), visiting historic sites (436 out of 1,202), sightseeing (175 out of

1,211), horseback riding (141 out of 439), snowskiing (48 out of 303) and snowmobiling (100 out of 740). Driving for pleasure, walking or hiking, bicycling, ice skating, picnics or cookouts and fishing were the exceptions.

The largest (modal) frequency groups for the activities driving for pleasure, walking or hiking and bicycling were the persons who participated ten times. Within the activities picnics or cookouts and fishing the largest frequency groups were those persons who participated twice. A tie for the largest frequency group (two and ten times) occurred in the activity ice skating.

The actual number of activity trips for each activity varied markedly from a low of 585 (pickup camping) to a high of 59,326 (driving for pleasure). Mean or average number of activity trips for the following activities were: visiting historic sites ($\bar{x}$ = 3.92), pickup camping ($\bar{x}$ = 5.08), tent camping ($\bar{x}$ = 5.29), sailing ($\bar{x}$ = 5.77), trailer camping ($\bar{x}$ = 6.94), canoeing ($\bar{x}$ = 7.04), picnics or cookouts ($\bar{x}$ = 8.23), hunting ($\bar{x}$ = 9.65), power boating ($\bar{x}$ = 10.52), fishing ($\bar{x}$ = 11.04), snowskiing ($\bar{x}$ = 13.23), horseback riding ($\bar{x}$ = 13.77), snowmobiling ($\bar{x}$ = 16.45), sightseeing ($\bar{x}$ = 17.52), ice skating ($\bar{x}$ = 22.84), driving for pleasure ($\bar{x}$ = 28.15), walking or hiking ($\bar{x}$ = 30.78) and bicycling ($\bar{x}$ = 49.64). The most popular activities, if one were to base this upon the mean or average number of activity trips were: bicycling, walking or hiking, driving for pleasure, ice skating and sightseeing. If one were to order the most popular activities based upon number of participants, driving for pleasure, picnics or cookouts, walking or hiking, fishing and sightseeing would be the five most popular outdoor recreation activities. A brief

discussion of the results of the segmenting procedure will now be discussed.

Segmentation of Participants into Decile Groups

The derivation of decile groups within activities was carried out in order to determine if a minority group (the last decile group) accounted for a majority of the total outdoor recreation participation (greater than 50%). The results of this divisive procedure are given in Tables 22 to 39, Appendix B. For those activities in which the sample size was uneven, i.e. could not be divided equally into decile groups, an appropriate number of participants from frequency group one were randomly deleted. In this manner, decile groups would be equal in size within each activity.

Fourteen activities were modified slightly in order to equally divide the participants into decile groups. These modified activities included pickup camping (n = 115 to n = 110), hunting (n = 416 to n = 410), tent camping (n = 763 to n = 760), power boating (n = 828 to n = 820), canoeing (n = 415 to n = 410), sailing (n = 162 to n = 160), visiting historic sites (n = 1,202 to n = 1,200), driving for pleasure (n = 2,107 to n = 2,100), sightseeing (n = 1,211 to n = 1,210), walking or hiking (n = 1,496 to n = 1,490), ice skating (n = 1,084 to n = 1,080), horseback riding (n = 439 to n = 430), snowskiing (n = 303 to n = 300), picnics or cookouts (n = 1,887 to n = 1,880). The four activities which did not require modification included trailer camping, bicycling, snowmobiling and fishing.

The number of participants within each decile differed for each activity. Decile group sizes varied from 11 (pickup camping) to 210 (driving for pleasure). Other decile group sizes were: 34 (trailer camping), 41 (canoeing and hunting), 82 (power boating), 16 (sailing), 120 (visiting historic sites), 121 (sightseeing), 30 (snowskiing), 74 (snowmobiling), 188 (picnics or cookouts), 108 (ice skating), 149 (walking or hiking), 43 (horseback riding), 112 (bicycling), 111 (fishing), and 76 (tent camping).

The percentage of the total frequency accounted for by each decile was derived from the actual frequency of activity trips for each decile. The results of the percentage of total frequency for each decile, as well as the cumulative frequencies are shown in rows 3 and 4 of Tables 22 to 39, Appendix B.

The selection of minority groups accounting for the majority of total outdoor recreation participation was determined. If the last or tenth decile within each activity accounted for greater than fifty per cent (50%) of the total outdoor recreation participation, the first hypothesis that minority/heavy-user groups exist was upheld for that activity. The results of the testing of the first hypothesis appear below.

The Identification of Minority/Heavy-User Groups

Six activities were singled out in which the tenth decile accounted for greater than fifty per cent (50%) of the total outdoor recreation participation. These activities included: trailer camping (tenth decile, 53.42%), hunting

(tenth decile, 55.45%), canoeing (tenth decile, 50.00%), walking or hiking (tenth decile, 59.31%), horseback riding (tenth decile, 72.12%), and sailing (tenth decile 50.42%). Of the twelve activities that remained, nine activities possessed tenth or last deciles which accounted for a range between 45 and 49.9%. These activities entailed pickup camping (47.8%), power boating (49.9%), snowmobiling (49.87%), ice skating (45.68%), visiting historic sites (45.6%), sightseeing (48.97%), bicycling (46.98%), fishing (47.92%), and tent camping (47.63%).

Driving for pleasure and snowskiing's minority groups had values of 43% and 42.25% respectively. Picnicking was the sole activity in which the tenth decile did not account for greater than 40% of the total participation (39.55%).

In summarizing, six activities were selected in which the last decile accounted for greater than 50% of the total outdoor recreation participation. Nine activities had tenth deciles which accounted for a range of 45 to 49.9%. Only three activities had tenth deciles which accounted for less than 45% of the total outdoor recreation participation. (Refer to Table 40).

TABLE 40

LIST OF EIGHTEEN OUTDOOR RECREATION ACTIVITIES SHOWING PERCENTAGE CONTRIBUTION OF LAST DECILE TO TOTAL PARTICIPATION

Last Decile Accounting For ≥ 50%		Last Decile Accounting For < 50%	
Trailer Camping	53.42%	Pickup Camping	47.90%
Hunting	55.45%	Power Boating	49.90%
Canoeing	50.00%	Snowmobiling	49.87%
Walking or Hiking	59.31%	Picnics or Cookouts	39.55%
Horseback Riding	72.12%	Ice Skating	45.68%
Sailing	50.42%	Visit Historic Sites	45.60%
		Driving for Pleasure	43.00%
		Sightseeing	48.97%
		Snowskiing	42.25%
		Bicycling	46.98%
		Fishing	47.92%
		Tent Camping	47.63%

CHAPTER 4

ANALYSIS OF SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF SUBAGGREGATE GROUPS OF OUTDOOR RECREATION PARTICIPANTS WITHIN SIX ACTIVITIES

Hypotheses 2(a) and 2(b) were tested simultaneously in order to determine if minority/heavy-users possessed distinctive socioeconomic and demographic characteristics when compared with majority/light-users within each activity. Univariate chi square tests were performed between the socioeconomic and demographic characteristics of the bottom nine deciles and those of the last or tenth deciles. The chi square tests were run for the six activities in which the last or tenth decile accounted for fifty per cent (50%) or greater of the total outdoor recreation participation. Fourteen socioeconomic and demographic characteristics were tested within each of the six activities (refer to Table 1).

The outcome of this testing procedure (refer to Table 41) showed that almost no significant differences occurred between the top and bottom deciles for five of the six activities using socioeconomic and demographic variables. The activity "walking or hiking" was the exception. Ten of the fourteen socioeconomic and demographic variables were significantly different between the minority/heavy-users and the majority/light-users for this activity. These differences included the demographic variables of marital status and age

TABLE 41

SUMMARY OF RESULTS OF CHI SQUARE DIFFERENCE OF PROPORTION TESTS BETWEEN THE TOP DECILE WHICH ACCOUNTS FOR A MAJORITY OF OUTDOOR RECREATION PARTICIPATION AND THE BOTTOM NINE DECILES FOR SIX OUTDOOR RECREATION ACTIVITIES USING 14 SOCIOECONOMIC/ DEMOGRAPHIC VARIABLES

	TRAILER CAMPING	CANOEING	HUNTING	WALKING OR HIKING	HORSEBACK RIDING	SAILING
VAR001 Province of Interview						
VAR002 Community Size					.001	
VAR003 Sex of Respondent			.05			
VAR004 Total Number in Household				.001		
VAR005 Children < 5 at Home				.001		
VAR006 Children 5 - 12 at Home				.001		
VAR007 Children 13 - 17 at Home		.05		.001		

Continued

TABLE 41 (Cont'd)

	TRAILER CAMPING	CANOEING	HUNTING	WALKING OR HIKING	HORSEBACK RIDING	SAILING
VAR008 Total Number of Children <18 At Home.				.05		
VAR009 Marital Status				.001		
VAR010 Occupation of Respondent				.01		
VAR011 Education of Respondent				.05		
VAR012 Age Group of Respondent				.001		
VAR013 Income Group of Household Head				.05		
VAR014 Observed Socioeconomic Level						

group of respondent: the family cycle variables of total number in households, children less than 5 years at home, children between 5 and 12 years at home, children between 13 and 17 years at home and total number of children less than 18 years at home: the socioeconomic variables of education of respondent, occupation of respondent and income group of head of household. Since at least one variable was significant in the three collapsed profile groups between the minority/heavy-users and majority/light-users, the second hypothesis was therefore upheld for the activity "walking or hiking."

The activities canoeing, hunting and horseback riding had one significant difference within each activity. The variable accounting for the significant difference between top and bottom deciles for canoeing was "children between 13 and 17 years at home." The only significant variable within the activity hunting was "sex of the respondent." "Community size" was the sole variable which was statistically different in the activity horseback riding. By reference to the rejection rule for hypotheses 2(a) and 2(b), the three activities of canoeing, hunting and horseback riding did not have distinctive socioeconomic and demographic characteristics between the top decile and bottom deciles. Trailer camping and sailing had no variables which were significant between the minority/heavy-users and majority/light-users. Thus hypotheses 2(a) and 2(b) were not upheld for trailer camping, hunting, canoeing, horseback riding and sailing.

Of the eighty-four (84) univariate chi square tests performed <u>in totum</u> (six activities multiplied by fourteen

TABLE 42

PROFILES OF MINORITY GROUPS OF OUTDOOR RECREATION PARTICIPANTS USING MODAL VALUES FOR SIX ACTIVITIES

	TRAILER CAMPING	CANOEING	HUNTING	WALKING OR HIKING	HORSEBACK RIDING	SAILING
VAR001 Province of Interview	Quebec (32.4%)	Ontario (56.1%)	Ontario (31.7%)	Quebec (29.5%)	Ontario (37.2%)	Ontario (56.3%)
VAR002 Community Size	Cities Over 500,000 (35.3%)	Cities Over 500,000 (41.5%)	Rural (51.2%)	Cities Over 500,000 (38.9%)	Rural (69.8%)	Cities Over 500,000 (75.0%)
VAR003 Sex of Respondent	Male (55.9%)	Male (65.9%)	Male (97.6%)	Female (54.4%)	Male (58.1%)	Male (62.5%)
VAR004 Total Number in Household	Four (26.5%)	Five (26.8%)	Four and Six (24.4%)	Two (26.2%)	Five (37.2%)	Three and Five (25.0%)
VAR005 Children < 5 at Home?	No (38.2%)	No (68.3%)	No (51.2%)	No (37.6%)	No (72.1%)	No (68.8%)

Continued

TABLE 42 (Cont'd)

	TRAILER CAMPING	CANOEING	HUNTING	WALKING, OR HIKING	HORSEBACK RIDING	SAILING
VAR006 Children 5 - 12 at Home?	Yes (50.0%)	Yes (48.8%)	Yes (61.0%)	Yes (32.2%)	Yes (62.8%)	No (43.8%)
VAR007 Children 13 - 17 at Home?	Yes (38.2%)	Yes (68.3%)	Yes (51.2%)	Yes (30.9%)	Yes (58.1%)	Yes (56.3%)
VAR008 Total Number of Children < 18 at Home	None (29.4%)	Three (26.8%)	Three (24.4%)	None (44.3%)	Two (27.9%)	One (37.5%)
VAR009 Marital Status	Married (64.7%)	Single (75.6%)	Single (56.1%)	Married (47.0%)	Single (79.1%)	Single (81.3%)
VAR010 Occupation of Respondent	Homemaker Only (32.4%)	Student (58.5%)	Student (46.3%)	Homemaker Only (28.2%)	Student (69.8%)	Student (62.5%)
VAR011 Education of Respondent	Fin.High School (32.4%)	Some High School (36.6%)	Some High School (48.8%)	Some High School. (41.6%)	Some High School (37.2%)	Some High School (31.3%)

Continued

TABLE 42 (Cont'd)

	TRAILER CAMPING	CANOEING	HUNTING	WALKING OR HIKING	HORSEBACK RIDING	SAILING
VAR012 Age Group of Respondent	35 - 39 Years (29.4%)	12 - 14 Years (29.3%)	12 - 14 Years (29.3%)	35 - 39 Years (38.3%)	12 - 14 Years (30.2%)	12 - 14 Years (17.5%)
VAR013 Income Group of Household Head	$9,000 - $10,499 (26.5%)	$9,000 - $10,499 (19.5%)	$4,500 - $5,999 (24.4%)	$4,500 - $5,999 (19.5%)	$6,000 - $7,499 (18.6%)	$14,000 or more (31.3%)
VAR014 Observed Socioeconomic Level	Middle (38.2%)	Middle (29.3%)	Lower-Middle (29.3%)	Middle (34.9%)	Middle (27.9%)	Middle (31.3%)

socioeconomic and demographic variables) only thirteen variables were significant: seven variables at the .001 level of significance, one variable at the .01 and five variables at the .05 level of significance. The resulting seventy-one chi square tests were not significant at even the .05 level of significance. Therefore, 84.53% ($\frac{71}{83}$ x 100) of the within-activity comparison tests were not significant using socio-economic and demographic variables.

A brief description of the distributions of the socioeconomic and demographic variables of the minority/heavy-user groups for the five activities of trailer camping, canoeing, hunting, and sailing will be offered. As these activities displayed little statistical difference in proportions between the top and bottom deciles, it is assumed that a description of the top deciles for each of these five activities will offer an adequate typology of their profile characteristics.

A description of the distribution of the socioeconomic and demographic characteristics of the top and bottom deciles for the activity "walking or hiking" will be included as this was the sole activity in which definite statistical differences in proportions occurred.

Trailer Camping (refer to Table 43, Appendix C)

Tables 43 to 48 outline the raw frequencies as well as the converted percentage proportions for the six activities. Reference to these tables should aid in explanation of this particular section. As was previously mentioned, only the

socioeconomic and demographic characteristics of the top deciles or minority/heavy-user groups will be described for the first five activities.

The province of interview variable (synonymous with the province of origin of the respondent) for trailer camping showed a rather unequal proportion of participants living in Quebec (32.4%) and Ontario (23.5%). Manitoba (14.7%), Saskatchewan (5.9%) and Alberta (11.8%) together accounted for 32.4% of the total. British Columbia and Newfoundland each contributed 5.9% to the number of participants in the top decile for trailer camping.

The community size variable indicated that greater than 50% of the top decile for trailer camping resided in large urban centres (over 500,000, 35.3%: 100,000 to 500,000, 20.6%). Almost 15% of the participants were from a rural area.

The "sex of respondent" variable was split in a ratio of 55.9% male, 44.1% female. The "total number in household" classification pointed toward the family group nature of this activity. Over 80% of the subsample (82.4%) had between three and ten or more persons within the household. Only 17.6% had a total household size of one (2.9%) or two (14.7%). The modal value for this variable was four persons (26.5%).

For the variables "children less than 5 years at home," "children 5 to 12 years at home" and "children 13 to 17 years at home" a brief explanation is in order. The responses for each of these three variables is "yes," "no" and "no children less than 18 years residing at home." The final response, "no children less than 18 years residing at home"

does not change for each of these 3 variables. A negative response indicates that there are no children within that particular age group. A positive response indicates that there are children within that particular age category. Almost 30% of the respondents in the top decile had no children less than 18 years residing at home (29.4%). In the "children less than 5 years" variable, 38.2% offered a negative response, 32.4% gave a positive response and 29.4% had no children less than 18 years of age residing at home. The responses for the 5 to 12 age group were: 20.6% no, 50% yes, 29.4% no children less than 18 years residing at home. The 13 to 17 year age variable illicited the following responses: no, 32.4%: yes 38.2%: no children less than 18 years, 29.4%. The major age distribution of children was 5 to 12, followed by 13 to 17 and less than 5 years.

About 70 per cent (70.6% to be exact) of the subsample had children or siblings less than 18 years residing at home. The number of families with one to four children accounted for 55.9%. Another 14.7% of the respondents had total numbers of children between five and seven.

Almost two-thirds of the subsample for trailer camping were married (66.7%), 32.4% were single. The occupation of respondent variable was distributed in the following manner: white collar jobs including professional (5.9%), executive, manager or owner (2.9%), sales (2.9%), and clerical or other white collar (5.9%) accounted for 17.6%; skilled (11.8%) and unskilled labour (2.9%) were 14.7%; homemaker only (32.4%), homemaker works part time (2.9%) and homemaker works full time (2.9%) together totalled 38.2%;

the student category was 26.5%. There were no retired or pensioned persons and only 2.9% of the subsample either refused or were unemployed. The modal occupation was therefore homemaker (32.4%), followed by a large proportion of students (26.5%).

The "level of schooling reached" variable was arranged in the following way: some public school (20.6%), finished public school (11.8%), some high school (26.5%), finished high school (32.4%), some technological or senior college (0%), finished technological or senior college (2.9%), some university (2.9%), graduated from university (2.9%). The modal value was "finished high school" (32.4%) with only 8.7% of the subsample having any degree of post-secondary education.

The "age group of respondent" variable appeared bimodally distributed with the 35 to 39 year (29.4%), and the 12 to 14 year (14.7%) age groups appearing at either end of the distribution. Those top decile participants in trailer camping over 30 years of age accounted for exactly 50% of the subsample. Those participants between the ages of 10 and 17 had 29.3% of the total. One can infer that roughly 80% of the trailer camping subsample was composed either of adults over 30 or dependent children under 17 which points to the family orientation of this activity.

The "income of head of household" variable showed that the modal category of $9,000 - $10,499 was in the main (26.5%); the subsequent divisions were: less than $2,999, (2.9%): $3,000 - $4,499 (0%): $4,500 - $5,999 (11.8%): $6,000 - $7,499 (14.7%): $7,500 - $8,999 (17.6%): $10,500 -

$11,999 (5.9%): $12,000 - $13,999 (8.8%): $14,000 or more (2.9%). There appeared to be a clustering of income groups around the $6,000 - $10,499 categories (58.8%) indicating a middle to lower-middle class orientation.

The "observed socioeconomic class" variable belied the middle to lower-middle class orientation. Exactly 50% of the participants were labelled "middle class" while "lower-middle class" participants accounted for 32.3% of the total subsample for trailer camping.

In summarizing, no significant differences in proportions occurred between the top and bottom deciles for trailer camping. The top decile participants appeared to be, for the most part, mature, married persons with two to four children. The ages of the children were largely in the 5 to 12 year category. The respondents were chiefly homemakers or students with a level of schooling of high school or less. The subsample seemed oriented toward middle to lower-middle classes with the province of origin being, for the most part, Quebec or Ontario and a community size variable which indicated a strong urban orientation.

Canoeing (refer to Table 44, Appendix C)

Canoeing is an activity which reflects extreme sensitivity to supply accessiblity and availability. Ontario, which is rife with relatively calm inland lakes and rivers conducive to canoeing participation offers and example of the concept of availability of supply affecting demand or consumption. Within the top decile for canoeing, Ontario participants accounted for 56.1% of the total subsample with

Quebec having 29.3%. Manitoba and Saskatchewan each contributed 4.9% to the subsample. British Columbia and Nova Scotia each had 2.4% of the total.

The top decile canoeists were mainly from cities of over 500,000 (41.5%) or cities between 100,000 and 500,000 populations (19.5%). Rural participants accounted for only 12.2% of the canoeing minority/heavy-user group.

Canoeists were largely male (65.9%) although some females did participate (34.1%). The modal value for total household size was five (26.8%) with 70.1% having a total household size ranging from three to ten or more. The values for total household size appeared to cluster around four to six (55%) indicating medium-sized families.

The family cycle variables (variables 005 to 007) showed the predominant ages of children or siblings to be between 13 to 17 years, (68.3%). The largest (modal) value within the "total number of children less than 18 years" was three (26.8%), pointing toward a medium-sized family origin of these participants. "No children less than eighteen" accounted for 24.4% of the total subsample.

Those canoeing participants who were single were in the majority (75.6%), with married participants having 24.4% of the subsample. Within the occupation variable, 58.3% were students with skilled labour accounting for 14.6%, and homemakers 12.2%. Only 7.4% were in the white collar occupation class.

The "level of schooling reached" variable was distributed in the following manner: some public school, 22%: finished public school, 2.4%: some high school, 36.6%:

finished high school, 7.3%: some technological or senior college, 4.9%: finished technological or senior college, 7.3%: some university, 12.2%: graduated from university, 7.3%. The largest values were therefore some high school or some public school.

The age group variable showed that a large majority of the canoeists were under 19 years (61.0%). The modal age category was 12 to 14 years (29.3%). Those respondents over 30 (30 to 49 years) accounted for 24.4% of the minority/heavy-user group for canoeing.

The modal income of household head was $9,000 - $10,499 (19.5%). There appeared to be a clustering around the categories $7,500 to $13,999 (61.0%) which appeared to denote a middle class or above orientation. The income of head of household variable was distributed thusly: less than $2,999 (7.3%), $3,00 - $4,499 (2.4%), $4,500 - $5,999 (0%), $6,000 - $7,499 (7.3%), $7,500 - $8,999 (17.1%), $9,000 - $10,499 (19.5%), $10,500 to $11,999 (9.8%), $12,000 - $13,999 (14.6%), $14,000 or more (9.8%).

A majority of the participants in the top decile of canoeing were of middle class orientation (48.8%) with upper-middle class (24.4%), lower-middle class (19.5%) and lower class (7.3%) being in the minority.

Those canoeists from the top decile who accounted for the majority of the recreating were, in the main, from Ontario and Quebec. They were chiefly from large urban centres. Single male canoeists from mature medium-sized families appeared to predominate. The ages were largely from 10 to 19 years and these participants were mainly middle to

upper-middle class.

Hunting (refer to Table 45, Appendix C)

Hunting tends to be largely rural/small-town oriented and centred in Quebec and Ontario. Maximum accessibility to game situated in non-urbanized surroundings belies the rural orientation. Hunters from Ontario were in the majority (31.7%), with Quebec (22%) and Saskatchewan (19.5%) contributing 41.5% to the top decile group. Over 50% of the top decile for hunting were from rural areas; 12.2% were from small towns with a population between 1,000 and 10,000. About 15% of the hunting participants were from large urban centres of over 100,000.

Hunting has been regarded almost solely as a male-dominated activity. The subsample exemplified this attitude as 97.5% of the participants were male. The ratio of married - single participants was split 41.5% (married) and 56.1% (single).

The "total number in household" variable was clustered around the values four to six (65.9%). Total household sizes of one (2.4%), two (4.8%), three (9.8%), seven (4.9%), eight (7.3%) and ten or more (4.9%) were in the minority. The family cycle variables showed that children's ages ranged predominantly from 5 to 12 (61.0%) and 13 to 17 years (51.2%). Only 19.5% of the top decile hunters had no children or siblings. The modal value in the variable "total number of children less than 18 years at home" was three (24.4%) followed by four (19.5%), none (19.5%) and two (17.1%). Medium-sized mature families therefore tended to predominate.

Students accounted for over 46% of the total subsample for hunting. Other values in the occupation variable included: white collar workers (4.9%), blue collar workers, both skilled (22.9%) and unskilled (7.3%), farmers (4.9%) and the unemployed or refused category (7.3%).

Within the "age group of respondent" variable 53.7% of the minority group hunters were between the ages of 10 and 19. The largest age group was 12 to 14 years (29.3%). The next largest age group were those participants 35 to 39 years (19.5%). The distribution for the age group was arranged in the following way: 10 to 11 years, 4.9%: 12 to 14 years, 29.3%: 15 years old, 2.4%: 16 to 17 years, 4.9%: 18 to 19 years, 7.3%: 20 years old, 4.9%: 21 to 24 years, 2.4%: 25 to 29 years, 12.2%: 30 to 34 years, 9.8%: 35 to 39 years, 19.5%: 40 to 44 years 2.4%.

The modal value for "level of schooling reached" was "some high school" (48.8%). The value "some public school" followed with 26.8%. Those who "finished high school" and finished public school each accounted for 7.3% of the total for the hunting subgroup. About 85.3% of the total subsample had a level of education of "some high school" or below.

The "income group of head of household" displayed a clustered distribution with 61.0% of the subsample lying within three income categories of $4,500 to $8,999. About 19% were above or below this figure. The modal income group was $4,500 to $5,999 (24.4%). The "observed socioeconomic variable" was skewed toward the lower socioeconomic range. Over 48% of the hunting subsample held an observed socioeconomic level of "lower-middle," 39% were "middle" class and 9.7% in the "lower" class

category.

The hunting subgroup therefore was largely from rural Quebec or Ontario. Young, single males were in the majority and originated from medium-sized families. Students from public and the lower grades of high school predominated. Hunting is an activity chiefly found within the lower-middle/ middle class with principally lower incomes in evidence.

Horseback Riding (refer to Table 47, Appendix C)

Horseback riding, like hunting, is chiefly a rural activity. Almost 70% of the total subsample resided within a rural area. Ontario (37.2%) and British Columbia (16.3%) were the two foremost provinces of origin. The subsequent provinces of origin were: Quebec (11.6%), Saskatchewan (9.3%), Manitoba (7.0%), and Alberta (7.0%). Newfoundland (4.7%), Nova Scotia (4.7%) and New Brunswick (2.3%) rounded out the total.

The distribution of the "community size" variable was: cities over 500,000, 7.0%: 100,000 - 500,000, 11.6%: 30,000 - 100,000, 0%: 10,000 - 30,000, 4.7%: 1,000 - 10,000, 7.0%: rural, 69.8%. Males predominated (58.1%) with females participating to a lesser extent (41.9%).

The "total number in household" variable pointed toward medium to large family sizes. The modal value for "the total number in household" variable was five (37.2%). Collapsing groups, family sizes between five and ten or more accounted for almost 70% of the horseback riding subsample. The ages of children appeared to favour the 5 to 12 (62.8%) and 13 to 17 year age brackets (58.1%). The "total

number of children less than 18 years" appeared to be clustered between two and four. About 65% had families with numbers of children from two to four. The distribution for the total number of children variable was: none, 11.6%: one, 11.6%: two, 27.9%: three, 23.3%: four, 14.0%: five, 4.7%: six, 2.3%: nine, 4.7%. The "total household size" variable indicated that large to medium household sizes were in the majority whereas the "total number of children" variable pointed to a smaller family size. A possible explanation may be that children over 18 years of age may still reside at home or the grandparents may live with the family.

The principal marital status was single (79.1%); those participants who were married accounted for 18.6% of the total subsample. Within the "occupation of respondent" variable, students held the modal value with 69.8%. All other occupation categories were more or less uniformly distributed. Horseback riding appeared to be an age-restrictive activity. No respondents were within the 40 to 49 age groups. Only one respondent indicated an age of 35 to 39 (2.3%). Only 9.4% were within the age categories of 25 to 34 years. Almost 75% of the horseback riding top decile group were between the ages of 10 and 19 years. The modal age category was 12 to 14 years (30.2%).

The "income of head of household" variable appeared fairly uniformly distributed. The income groups between $3,000 and $7,499 contributed 46.5% to the total. The modal income group was $6,000 - $7,499 (18.6%); other categories included: less than $2,999, 4.7%: $3,000 - $4,499, 11.6%:

$4,500 - $5,999, 16.3%: $7,500 - $8,999, 9.3%: $9,000 - $10,499, 14.0%: $10,500 - $11,999, 2.3%: $12,000 - $13,999, 2.3%: $14,000 or more, 9.3%: don't know, no estimate or refused, 11.6%. Collapsing categories, over 50% of the heads of households for horseback riding earned less than $7,499, about 37% earning between $9,000 and $14,000 or more.

The "observed socioeconomic level" variable pointed towards a middle/lower-middle class orientation. About 42% of the horseback riding minority group were of a middle class origin; the lower-middle (32.6%), lower (11.6%) and upper-middle (14.0%) accounted for the subsequent minority per cent of the total.

Those participants in horseback riding were largely from rural areas in Ontario and British Columbia. The family sizes were medium to large with children being largely in the 5 to 12 and 13 to 17 age brackets. The top decile participants within this activity were youthful, single males who were still students originating from the middle to lower-middle classes.

Sailing (refer to Table 48, Appendix C)

Ontario appears, as in most of the activities analyzed, to be the mecca of outdoor recreation in Canada. The activity sailing also indicated this to be true as 56.3% of the sailing subsample originated in Ontario. This figure is similar to the 56.1% province of interview figure for canoeing. Other provinces of origin were: Quebec (18.8%), Nova Scotia

(12.5%) and British Columbia (12.5%). Sailing enthusiasts were, for the most part, from community sizes of 100,000 to 500,000 (18.8%) and 500,000 and over (75.0%). Only 6.3% were from rural areas.

The male - female ratio was 62.5% - 37.5% respectively. The total household size was inclined to be less than five (87.6%). The modal value within the "total household size" variable was tied at three and five (25%). The family cycle variables pointed toward maturing households with the 13 to 17 (56.8%) and 5 to 12 age brackets (31.3%) of children predominating. The "total number of children less than 18 years" variable belied the smaller family sizes within the sailing subgroup. The variable was distributed in the following manner: none, 25%: one, 37.5%: two, 12.5%: three, 12.5%: four, 6.3%: five, 6.3%. The mode for the "total number of children" variable was one (37.5%).

The top decile participants within sailing were largely single (81.3%) and students (62.5%). Those married participants accounted for 18.8%. Occupations represented in the sailing subgroup were: white collar, 12.6%: homemaker only, 12.5%: homemaker working full time, 12.5%: and students, 62.5%.

The modal education level was "some high school" (31.3%). Other "levels of schooling reached" included: some public school (25%), finished public school (6.3%), finished high school (18.8%), some university (6.3%) and graduated from university (12.5%). The age group variable was distributed in the following manner: 10 to 11 years, 12.5%:

12 to 14 years, 17.5%: 15 years old, 6.3%: 18 to 19 years, 6.3%: 21 to 24 years, 12.5%: with the age categories, 25 to 29, 30 to 34, 35 to 39 and 40 to 44 each having 6.3%. Over 40% of the sailing subgroup were under 19 years of age, with 37.7% between the ages of 21 to 44.

The "income group of household head" variable indicated a somewhat higher income level than any previous activities mentioned. The modal income group was that of $14,000 or more (31.3%): the $9,000 - $10,499 group added 18.8% to the total income variable of the subsample. The distribution within the observed socioeconomic level did not point toward a majority of upper-middle class participants. The majority of the sailing enthusiasts were middle class (56.3%) followed by upper-middle (18.5%), lower-middle (12.6%) and lower class (12.5%).

Sailing, therefore, is a middle/upper-middle class activity. Lower classes appear to be under-represented in this activity as: (a) they cannot afford the original investment of a sailing craft; (b) they cannot afford the membership fees to a sailing club; (c) they are not able to afford upkeep or birthing fees for the sailing craft.

The characteristics of the persons in the top decile are: young, single males who are from smaller family sizes. These sailing enthusiasts are still enrolled in high school or public school. They appear to be from families of a higher than average socioeconomic level.

Walking or Hiking (refer to Table 46, Appendix C)

Walking or hiking, as mentioned previously, was the

sole activity in which significant differences were apparent between the tenth or top decile who participated most frequently and the bottom deciles. A description of the variables of both the top decile and bottom deciles will be offered in order to outline what differences occur and where the differences between the two groups lie.

The first three variables, namely province of interview, community size, and sex of respondent were not significant at the .05 level of significance or greater. The top decile or minority/heavy-user group was largely found in Quebec (29.5%), Ontario (27.5%) and British Columbia (19.5%). The participants from other provinces were fairly uniformly distributed. The bottom deciles more or less mimicked the top decile distribution. Again Quebec (33.7%), Ontario (32.5%) and British Columbia (11.1%) were the three most apparent provinces of origin, yet more heavily weighted toward Quebec and Ontario. A "community size" of over 500,000 was the modal value for both the top and bottom deciles (38.9% and 33.7% respectively). Each of the two subgroups displayed a "U"-shaped distribution in which the two end values of "cities over 500,000" and "rural" held relatively higher values; the middle value labels of community sizes 30,000 - 100,000, 10,000 - 30,000 and 1,000 - 10,000 held comparatively fewer participants. Rural participants in the top decile accounted for 18.1%, and in the bottom deciles, 20.7%. Each of the two groups tapered off to 3.4% (top decile) and 7.5% (bottom deciles) in the middle of the distributions.

The "sex of respondent" variable was almost split

evenly in the bottom deciles. Forty-nine per cent of the subsample were male, fifty-one per cent female. In the top decile, there existed a slight bias toward female participants. Females accounted for 54.4%, males 46.6%. Females, therefore who participate most frequently were more in abundance than those females who participate in walking or hiking to a lesser degree.

The "total number in household" variable was statistically significant at the .001 level of significance. The modal value for the top decile was two (26.2%); the modal value for the bottom deciles was four (20.2%). A greater number of those participants in the top decile evidently had no children or were single. The inference may be that young children have somewhat of a constricting effect upon recreation frequency in this activity.

Almost 45% of the top decile indicated that they had no children, compared with 27.9% of the bottom deciles. Only 18.1% of the top decile indicated that they had children or a child in the "less than five" category, relative to 21.7% in the majority group. Only 32.2% of the top decile had children in the 5 to 12 year category compared with 48.2% of the bottom deciles. Similarly, the bottom decile participants indicated a value of 46.2% in the 13 to 17 year age bracket relative to 30.9% within the minority group. Differences, therefore, were primarily in numbers of children, as the ages of children were proportional between the two subgroups.

There were more single participants in the bottom deciles (54.7%) than the tenth decile (41.6%). Less participants were married in the bottom deciles (40.3%) in comparison with the figure of 47% for the top decile. Also, there were less widowed, separated or divorced participants among the bottom decile participants (5%) than the tenth decile (11.4%). In other words, there were comparatively more participants in the bottom deciles who were single than in the top decile.

The "occupation of respondent" variable offers more explanation for the differences between the minority/heavy-users and majority/light-users. The modal value for the minority frequency group within the occupation variable was "homemaker only" (28.2%); the "student" category was only two per cent below this figure (26.2%). The modal value within the bottom nine deciles was "student" (42.1%) with the "homemaker only" category having 21.7%. There were comparatively more students who participated in walking or hiking to a lesser degree. Also, more pensioned participants (8.7% in the top decile: 3.1% within the bottom deciles) were apparent within the minority-frequency group. The resulting proportions were more or less equally distributed between the two subgroups in the occupation category.

The modal value for the education variable for both subgroups was "some high school" (41.6% - top decile: 34.3% - bottom deciles). The similarity between the two subgroups within the education variable ended here. The next most frequent values for the top decile were: "finished high school" (16.3%), "some public school" (14.8%) and "finished public school" (9.4%). The next most frequent

values for the bottom deciles were: "some public school" (24.5%), "finished high school" (12.8%), and "finished public school" (6.5%). An explanation for both the differences in proportion and order between the top and bottom deciles for the education variable may be available by analysis of the "age group of respondent" variable. There were far more children within the age categories 10 to 14 years in the bottom deciles than in the top decile (bottom deciles, 27.5%: top decile, 12.8%). Also, the top decile had proportionately more persons in the 35 to 39 year category (38.2%) than the bottom deciles (19.2%). Subsequent categories in the age and education variables were more or less similarly distributed.

The chief differences within the "income of head of household" variable between the two frequency subgroups lay in the distribution of the lower income categories. The minority/heavy-user group had 41.7% of the subsample within the "less than $2,999" to $5,999 income bracket compared with 25.4% within the same income bracket for the majority/light-users. In other words, the top decile within walking or hiking were mainly persons who possibly could not afford more expensive forms of outdoor recreation. An example of this could be pensioners with a fixed income and a surplus of leisure time, or homemakers within lower socioeconomic classes who have much free time and a limited income. The income variable was distributed in the following manner for the top decile: less than $2,999, 14.8%: $3,000 - $4,499, 7.4%: $4,500 - $5,999, 19.5%: $6,000 - $7,499, 10.1%: $7,500 - $8,999, 10.7%: $9,000 - $10,499, 12.1%:

$10,500 - $11,999, 6.7%: $12,000 - $13,999, 4.0%: $14,000 or more, 8.7%. The income distribution for the bottom deciles for the same categories was: 5.6%, 8.5%, 5.6%, 11.3%, 15.6%, 16.0%, 13.0%, 7.5%, 6.0%, 8.6%, 2.3%. The modal income group for the top decile was $4,500 - $5,999 (19.5%) in comparison with the $7,500 - $8,999 income category for the bottom deciles (16%).

The "observed socioeconomic level" variable was not statistically significant at the .05 level of significance between the two subgroups. The top decile was distributed in the following manner: lower, 12.1%: lower-middle, 28.8%: middle, 47%: upper-middle, 10.1%: upper, 2%. The bottom deciles were arranged as lower, 6.7%: lower-middle, 30.4%: middle, 47.9%: upper-middle, 13.9%: upper, 1.1%. The top decile subgroup had 5.4% more persons in the lower class, 1.6% more within the lower-middle and 3.8% less within the upper-middle class than the bottom deciles.

In conclusion, the top decile was characterized by slightly more female than male participants, largely from urban centres of Quebec and Ontario. The minority/heavy-users in walking or hiking had chiefly two persons in the household and the modal occupation was "homemaker only." The age bracket was largely 35 to 39 years. There was a large proportion of this subgroup within the lower socioeconomic strata.

The bottom nine deciles were proportionately similar to the top decile in the province of origin, community size, sex of respondent and observed socioeconomic level variables. The main differences existed in the total number in household,

family cycle, number of children, marital status, occupation and income of head of household variables. The distribution for the bottom deciles indicated a larger family orientation with children's ages largely in the 5 to 12 and 13 to 17 year brackets. There were many more single, young students still enrolled in public or high school within the bottom deciles. The participants in the bottom deciles of "walking or hiking" were also from a slightly higher socioeconomic level.

CHAPTER 5

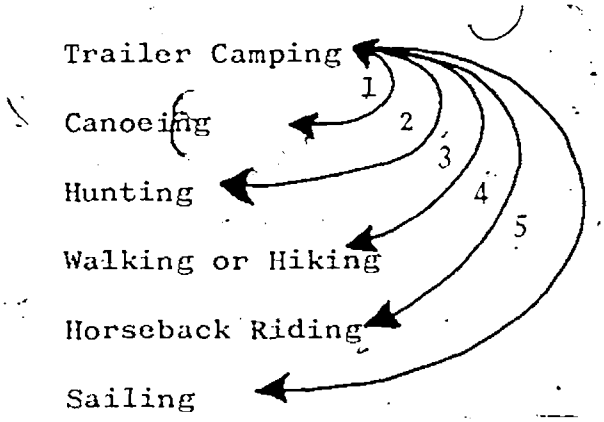
ANALYSIS OF THE SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF MINORITY/HEAVY-USER GROUPS BETWEEN ACTIVITIES

The third hypothesis, namely that the minority/heavy-user groups do not share the same socioeconomic and demographic characteristics was analyzed. The criteria for accepting or rejecting the third hypothesis consisted of the following: if one profile variable from each of the three collapsed profile groups is found to be statistically different between two minority/heavy-user groups of two different activities, the two activity user groups are statistically different. The three collapsed groups of socioeconomic and demographic variables were: demographic, family cycle and socioeconomic.

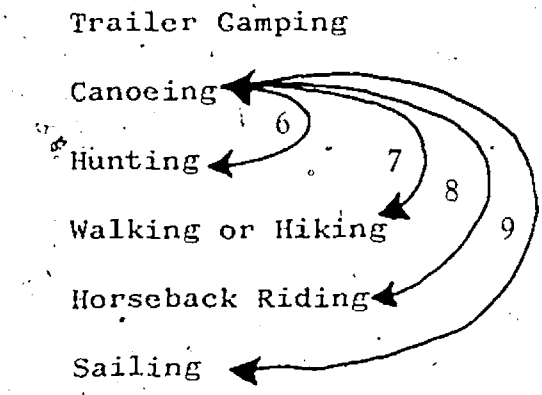
Six activities previously examined for within-group differences were now analyzed for between-group differences. Fifteen combinations of two-activity analysis were implemented. These combinations are outlined in Table 49. Two-sample chi square tests of proportional differences were run between the fifteen combinations of the six activities using the fourteen socioeconomic and demographic variables. In order to accept the third hypothesis using a level of significance of .05, 14 of the 15 between-activity combinations would have to be significant. Significance levels were set up using the formula $\frac{100}{n(n-1)/2}$. As only eight of the

TABLE 49

DERIVATION OF FIFTEEN TWO-ACTIVITY COMBINATIONS FROM SIX ACTIVITIES

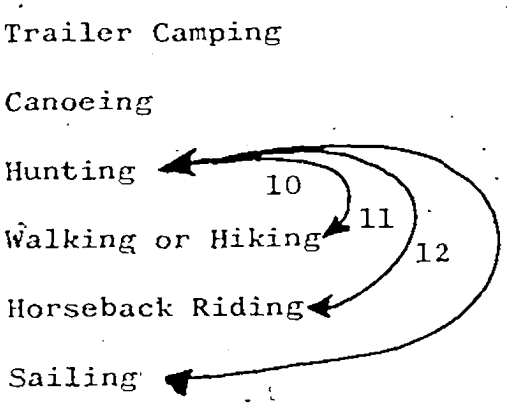


Result:
1. Trailer Camping and Canoeing
2. Trailer Camping and Hunting
3. Trailer Camping and Walking or Hiking
4. Trailer Camping and Horseback Riding
5. Trailer Camping and Sailing

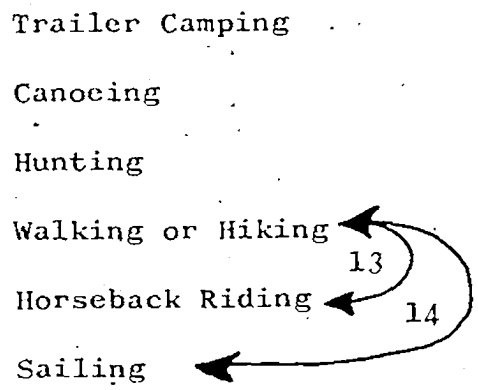


Result:
6. Canoeing and Hunting
7. Canoeing and Walking or Hiking
8. Canoeing and Horseback Riding
9. Canoeing and Sailing

TABLE 49 (Cont'd)



Result: 10. Hunting and Walking or Hiking
11. Hunting and Horseback Riding
12. Hunting and Sailing



Result: 13. Walking or Hiking and Horseback Riding
14. Walking or Hiking and Sailing

TABLE 49 (Cont'd)

Trailer Camping

Canoeing

Hunting

Walking or Hiking

Horseback Riding

15

Sailing

Result: 15. Horseback Riding and Sailing

fifteen activity combinations were significant, the third hypothesis was not upheld.

Out of a possible 210 chi square tests, (15 activities multiplied by 14 socioeconomic and demographic characteristics), 76 chi square tests were significant: 23 at the .05 level of significance, 21 at the .01 level of significance and 32 at the .001 level (refer to Table 50). The following socioeconomic and demographic variables are ranked in order of importance with those variables showing the highest level of significant differences placed first: community size (11), occupation of respondent (8), income group of head of household (8), age group of respondent (7), sex of respondent (6), children less than five years at home (6), children thirteen to seventeen years at home (6), marital status (6), total number in household (5), total number of children in household under eighteen years (4), province of interview (4), children five to twelve years at home (2), observed socioeconomic level (2), education of respondent (1). By collapsing the fourteen socioeconomic and demographic variables into the three profile groups, demographic, family cycle and socioeconomic, the demographic variables accounted for 34 of the 76 significant results. The family cycle variables accounted for 23 of the 76 and the socioeconomic variables showed 19 signficant outcomes. (refer to Table 51).

As a result of the between-activity testing procedure for minority activity groups, one hundred thirty-four variable combinations out of two hundred ten (134 out of 210) were <u>not</u> significant. Thus 63.3% of the cases

TABLE 50

SUMMARY OF RESULTS OF CHI SQUARE DIFFERENCE OF PROPORTION TESTS BETWEEN COMBINATIONS OF TOP DECILES OF 6 OUTDOOR RECREATIONAL ACTIVITIES AND 14 SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

	*TC & C	TC & H	TC & W/H	TC & HBR	TC & S	C & H	C & W/H	C & HBR	C & S	H & W/H	H & HBR	H & S	W/H & HBR	W/H & S	HBR & S
VAR001 Province of Interview	.05					.05	.01	.01							
VAR002 Community Size		.001		.001	.05	.001		.001	.05	.001		.001	.001	.05	.001
VAR003 Sex of Respondent		.001				.001	.05			.001	.001	.001			
VAR004 Total Number in House			.05							.001		.01	.001		.001
VAR005 Children < 5 at Home	.01			.01		.05	.01			.01			.001		

Continued

TABLE 50 (Cont'd)

	*TC & C	TC & H	TC & W/H	TC & HBR	TC & S	C & H	C & W/H	C & HBR	C & S	H & W/H	H & HBR	H & S	W/H & HBR	W/H & S	HBR & S
VAR006 Children 5 - 12										.05			.001		
VAR007 Children 13 - 17	.01					.05	.001	.01		.01			.001		
VAR008 Total Number Children in House			.01	.05						.05			.001		
VAR009 Marital Status	.001				.01		.001			.01			.001	.01	
VAR010 Occupation of Respondent	.05	.001		.01			.001			.001		.05	.001	.05	
VAR011 Education of Respondent.						.05									

Continued

TABLE 50 (Cont'd)

	*TC & C	TC & H	TC & W/H	TC & HBR	TC & S	C & H	C & W/H	C & HBR	C & S	H & W/H	H & HBR	H & S	W/H & HBR	W/H & S	HBR & S
VAR012 Age Group of Respondent	.05			.001			.001			.01	.05		.001	.001	
VAR013 Income Group of Household Head		.05	.05		.05	.01	.01	.05				.01		.01	
VAR014 Observed Socio-economic Level						.01						.05			

*TC = Trailer Camping
C = Canoeing
H = Hunting
W/H = Walking or Hiking
HBR = Horseback Riding
S = Sailing

TABLE 51

THE FREQUENCY WITH WHICH CERTAIN SOCIOECONOMIC, FAMILY CYCLE AND DEMOGRAPHIC VARIABLES DISPLAYED SIGNIFICANT DIFFERENCES BETWEEN FIFTEEN TWO-ACTIVITY COMBINATIONS OF MINORITY/HEAVY-USER GROUPS

	VARIABLE NAME	FREQUENCY DIFFERENCES	OUT OF 15 COMBINATIONS
1.	Province of Origin	4	15
2.	Community Size	11	15
3.	Sex of Respondent	6	15
4.	Total Number in Household	5	15
5.	Children < 5 Years at Home	6	15
6.	Children 5 - 12 Years at Home	2	15
7.	Children 13 - 17 Years at Home	6	15
8.	Total Number of Children < 18 Years at Home	4	15
9.	Marital Status of Respondent	6	15
10.	Occupation of Respondent	8	15
11.	Education of Respondent	1	15
12.	Age Group of Respondent	7	15
13.	Income Group of Head of Household	8	15
14.	Observed Socioeconomic Level	2	15
	TOTAL	76	210

were not significant between frequency group combinations using socioeconomic and demographic variables. Furthermore 84.53% of the cases were not significant within frequency groups using socioeconomic and demographic variables as stated in Chapter 4. These figures of non-significance point to the general inadequacy of socioeconomic and demographic variables in explaining frequency of participation in outdoor recreation activities as indicated by such authors as Ferris (1970), Mercer (1971), Romsa (1974), Sofranko and Nolan (1972), Yoesting and Burkhead (1973), Field and O'Leary (1973), Burch (1969), Meyersohn (1969), Lee (1972), Yancy and Snell (1971) et cetera. Possibly other differences such as perception, attitudes and value systems, childhood experiences, and the social group role of recreation do play a more significant role than socioeconomic status variables in explaining differential frequency of participation rates of user groups both within and between activities.

A brief description of each of the 15 combinations of activities follows in order to determine where differences in proportions lie between activities.

Trailer Camping and Canoeing

The statistical differences between trailer camping and canoeing were displayed in the province of interview, children less than five years at home, children thirteen to

seventeen years at home, marital status, occupation of respondent and age group of respondent variables.

Within the "province of interview" variable, there were proportionately more canoeists from Ontario and Quebec than for trailer camping. Few canoeists originated from the Maritime or Western Provinces. The trailer camper appeared far more uniformly distributed save for the Maritime Provinces where none existed.

Those canoeists within the top decile had almost no children in the "under five" category compared with the top decile group of trailer campers, about one third of whom indicated that they had children in this age category. Children in the thirteen to seventeen age bracket were more plentiful in the top decile for canoeing (68.0%) in comparison with the trailer camping subgroup (38%). The top decile participants in trailer camping appeared to be married persons who participated with their children. Many of the canoeists themselves were within the thirteen to seventeen age bracket.

Within the occupation variable, far more canoeists indicated that they were students (60.9%) than in trailer camping (26.5%). More trailer campers were homemakers (37.2%) and white collar workers (15.6%) than canoeists. The age group variable between the two activities was oppositely skewed. Canoeists, for the most part, were teenagers (60.9%); the trailer campers were mature adults i.e. within the 30 - 49 year age bracket (50.0%).

Trailer Camping and Hunting

The main differences between the activities trailer

camping and hunting arose in the following variables: community size, sex of respondent, occupation of respondent and income group of head of household.

The top decile hunters were largely from a rural/small-town environment (75%). The minority/frequency group for trailer camping was chiefly from larger urban centres (55%). Hunters were almost exclusively male (97.5%) compared with a 55% - 45% male-female ratio in the trailer camping subgroup.

Trailer campers were personified by a large homemaker occupation group; students and blue collar workers predominated in hunting. Almost 44% of the hunters were within the $5,999 or under income categories while only 23.5% of the trailer campers fell into these income categories. About 44% of the trailer camping subgroup were in the $9,000 - $14,000 or more income brackets in comparison with 19.5% of the hunting subgroup.

Trailer Camping and Walking or Hiking

The activities trailer camping and walking or hiking showed three variable differences. These variables were: total number in household, total number of children less than 18 years residing at home and income of head of household.

The top decile frequency group for walking or hiking tended to have a smaller household size of either one or two (38.2%) in comparison with trailer camping enthusiasts (17.6%). Trailer camping enthusiasts had a propensity toward larger household sizes of four to seven (61.8%). Also, a majority of the walking or hiking minority group possessed no children (44.2%) in comparison with trailer campers (29%). Trailer

campers had larger numbers of children (three or more: 38.1%) than walkers or hikers (26.2%).

About 15% of the trailer camping heads of households earned less than $5,999 with 41.6% of the walkers or hikers being represented within these income categories. Only 32% of the top decile group of walkers or hikers earned between $6,000 and $10,499 compared with 58% of the trailer camping heads of households. The upper income groups were similarly distributed between trailer campers (17.6%) and walkers or hikers (19.4%).

Trailer Camping and Horseback Riding

The dissimilarities between trailer camping and horseback riding occurred in the variables of community size, children less than five years at home, total number of children in household, occupation of respondent and age group of respondent.

The top decile for horseback riding originated predominantly from rural areas (69.7%); only 14.7% of the trailer campers were from a rural background being predominantly urban oriented (55.8%).

One-third of the trailer camping subgroup indicated an affirmative response to "children less than five years at home" compared with only 18.6% of the horseback riding top decile. About 72% of the horseback riding subgroup had no children or siblings in the under five year category with only 38% of the trailer campers giving a negative response to this variable.

The "total number of children in household" variable indicated that trailer campers had a larger proportion with no children, less numbers of children between one and three, about 10% greater in the four and five category with less children in the six to ten categories when compared to the distribution of the horseback riding subgroup.

Almost 70% of the horseback riding top decile were identified as students, 13.9% were homemakers, 11.6% blue collar workers and 4.6% white collar workers. Trailer campers were predominantly identified as homemakers (38.2%), students (29.4%), blue collar workers (14.7%), or white collar workers (17.6%).

Within the "age group of respondent" variable, 60.4% of the top decile within horseback riding were between the ages of 10 to 15 years. The 35 to 49 year age bracket held the largest accountability of the total (44.1%) within trailer camping. The age distributions for trailer camping and horseback riding were as follows: 10 to 15 years (20.5%, trailer camping: 60.4%, horseback riding), 16 to 19 years (8.8% and 13.9%), 20 to 24 years (11.7% and 13.9%), 25 to 34 years (14.7% and 9.3%) and 35 to 49 years (44.1% and 2.3%).

Trailer Camping and Sailing

The chief incommensurabilities between trailer camping and sailing were in three variables: community size, marital status and income group of head of household.

The sailing group was almost exclusively urban oriented with 93% of the subsample from cities between 100,000 and 500,000 or over. Only 6.25% of the sailing

enthusiasts were from a rural area. Trailer campers were distributed in the following manner: cities over 500,000, 35.2%: cities of 100,000 to 500,000, 20.5%: cities of 30,000 to 100,000, 11.7%: communities 1,000 to 30,000, 8.82% and 14.7% rural.

About 81% of the sailing minority group were single and 18.5% married. Inversely, over 64% of the trailer camping subgroup were married, 32.3% being single.

The "income group of household head" variable indicated that the primary differences between trailer camping and sailing were found in the $14,000 and over income category. The sailing subgroup had 31.25% within this income category compared with 2.9% for trailer camping. The modal income category for trailer campers was tied at 16.3% for both the $6,000 - $7,499 and $7,500 - $8,999 income groups. The modal income for sailing was $14,000 or more (31.25%).

Canoeing and Hunting

The top deciles for canoeing and hunting held dissimilarities for the following variables: province of interview, community size, sex of respondent, children less than five years at home, children thirteen to seventeen years at home, education of respondent, income group of head of household and observed socioeconomic level.

Canoeists were primarily centred in Ontario (56.1%) and Quebec (29.2%), the Maritime and Western provinces accounting for 2.4% and 12.1% of the total respectively. Hunters were primarily found in Ontario (31.7%), the Western

provinces (36.5%), Quebec (21.9%) and the Maritime provinces (9.75%). Those participants in the top decile of canoeing were primarily urban-oriented: 60.9% were from urban areas with a population range of 100,000 to 500,000 and over. Only 12.1% of the canoeists were from a rural setting. Hunters, on the other hand, were chiefly rurally-centred (51.2%): only 14.6% were from cities ranging in size from 100,000 to 500,000 and over.

The ratio of males to females was decidedly different between the two activities. Hunting was male-dominated (97.5%) while canoeing had a ratio of 65.8% male to 34.2% female. The variable "children less than five years at home" displayed significant differences between canoeists and hunters. About 68% of the canoeing subsample had no children within the under five category compared with 51.2% of the hunting subsample. An affirmative response to the "children less than five years at home" variable illicited 7.3% of the total canoeing subsample and 29.3% of the hunting frequency group. The second family cycle variable which differed between the two activities was "children 13 to 17 years at home." More canoeists had children in this age category in comparison with the hunters. About 68% of the canoeists versus 51.2% of the hunters answered affirmatively. Only 7.3% of the canoeing subgroup had no children in the 13 to 17 age group compared with a percentage figure of 29.2% for the hunting subgroup. About one-quarter of the canoeing frequency group had no children at all under 18 years of age residing at home. The hunting subgroup contained 19.5% of the total participants who had no siblings or children

under 18 years of age.

The socioeconomic variables which were dissimilar between the two activities were: education of respondent, income group of head of household and observed socioeconomic level. Within the education variable, about 24% more of the canoeing subsample had a post-secondary education of some form or other. The modal education values for canoeing and hunting were similar between the two activities. About 36.6% of the canoeing subsample indicated an education level of "some high school." A figure of 48.8% for the hunting subgroup was offered for the modal education level of "some high school."

The "income of head of household" variable displayed a higher level of income for the canoeing subgroup than the hunting subgroup. About 41% of the heads of households for hunters earned under $5,999 compared with only 9.75% of the canoeing frequency group. Also, 34.1% of the heads of households for canoeing earned between $10,500 and $14,000 or more in comparison with 9.7% of the total heads of households for hunting. The modal income groups for hunting and canoeing were $4,500 - $5,999 (24.4%) and $9,000 - $10,499 (19.5%) respectively.

The "observed socioeconomic level" variable showed that almost 60% of the hunting subgroup were in the lower-middle to lower socioeconomic classes. There were only 28.6% of the canoeists in these lower class categories. The middle class participants in hunting and canoeing were 39% and 48.7% respectively. Those participants in the upper-middle socio-economic class for hunting and canoeing totalled 24.3% and 7.3%.

Canoeing and Walking or Hiking

The comparison between the socioeconomic and demographic variables of canoeing and walking or hiking displayed eight dissimilarities. These dissimilarities were found in the following eight variables: province of interview, sex of respondent, children less than five years at home, children 13 to 17 years at home, marital status, occupation of respondent, age group of respondent, and income group of head of household.

The province of interview variable was distributed in the following manner for canoeing: the Maritimes, 2.4%: Quebec, 29.2%: Ontario, 56%: the Western Provinces, 12.1%. Walkers or hikers alternatively were found in the following regions: the Maritimes, 7.3%: Quebec, 29.5%: Ontario, 27.5%: the Western Provinces, 35.5%. By comparison, the top decile respondents in walking or hiking were distributed more uniformly than canoeists. More walkers and hikers were found in the Western Provinces than canoeists and, conversely more canoeists were found in Ontario than walkers or hikers.

The demographic variable dissimilarities were sex of respondents, marital status and age group of respondent. There were far more male participants in the top frequency group for canoeists than for walking or hiking enthusiasts. Inversely, there was a greater majority of females in the walking or hiking activity compared with canoeing. The male - female ratios for canoeing and walking or hiking were: 65.8% male, 34.2% female: 45.6% male, 54.4% female. Within canoeing, 75.6% were single, 24.3% married and no participants were divorced, widowed or separated. The walking or hiking participants had 41.6% single, 46.9% married and 11.4% widowed,

divorced or separated. More canoeists were single, and less widowed, divorced or separated than those participants in walking or hiking. Another difference within the demographic grouping was the "age group of respondent" variable. The age distribution for canoeists was: 10 to 15 years, 41.4%: 16 to 19 years, 19.5%: 20 to 24 years, 14.6%: 25 to 34 years, 4.8% and 35 to 49 years, 19.5%. The age groups for the top decile in walking or hiking were distributed in the following manner: 10 to 15 years, 14.7%: 16 to 19 years, 14%: 20 to 24 years, 9.3%: 25 to 34 years, 12.7%: 35 to 49 years, 48.99%. Canoeists, in the main were teenagers, with 60.9% under 19 years of age. The largest group within walking or hiking were those in the 35 to 49 year bracket (48.99%).

The family cycle variables of note were: children less than five years at home, and children 13 to 17 years at home. The distributions for canoeing and walking or hiking respectively were as follows: no children less than five, 68.2% and 37.5%: children less than five years, 7.3% and 18.1%: no children less than 18 years, 24.3% and 44.2%. Canoeists had proportionately for less children or siblings in the "under five year" category than those walking or hiking. About 44.2% of those walking or hiking had no children at home under 18 years of age in lieu of the 24.3% figure for canoeing.

More participants in walking or hiking appeared to have children within the 13 to 17 age bracket (30.8%) than in the under 5 year category (18.1%). Also, 24.8% of the walkers or hikers had no children in the 13 to 17 age

bracket as well as 44.2% who had no children less than 18 years. Almost 70% of the canoeists had children or siblings in the 13 to 17 age group, with 7.3% stating a negative response to this question. Again, 24.3% of the canoeists had no children under 18 years of age.

Occupation of respondent and income group of head of household were the socioeconomic variables which differed between the two top frequency decile groups. The major differences encountered in the occupation variable occurred between the canoeists who indicated a student occupation classification (60.9%) and the walkers or hikers who were strongly homemaker-oriented (46.9%). The white and blue collar occupation categories between the two activity groups were closely comparable. White collar occupation classes were: 7.3% for canoeists, 7.8% for those walkers or hikers. Blue collar (skilled or unskilled labour) occupation categories were 17% for canoeists and 14% for those respondents in walking or hiking.

The "income of head of household" variable was also a source of dissimilarity between the two activity groups. The walking or hiking enthusiasts were represented strongly in the under $7,499 income class, (less than $2,999 to $7,499) with 51.6%. The modal income of household head for walking or hiking was $4,500 - $5,999 (19.4%). The canoeists modal income of household head was $9,000 - $10,499 (19.5%). The majority of the canoeists were within the category of $7,500 to $14,000 and above (70.7%). The heads of households for those top frequency participants in canoeing appeared financially better-off than those in walking or hiking.

Canoeing and Horseback Riding

The differences between the top decile participants in canoeing and horseback riding were limited to four variables: province of interview, community size, children between the ages of 13 to 17 years and income group of household head.

The distribution for canoeing in the "province of interview" variable was as follows: the Maritimes, 2.4%: Quebec, 29.2%: Ontario, 56%: the Western Provinces, 12.1%. Horseback riding buffs were distributed in the following manner: the Maritimes, 11.6%: Quebec, 11.6%: Ontario, 37.2%: the Western Provinces, 39.5%. More horseback riding enthusiasts were found in the Maritimes, and the Western Provinces than the canoeing group. The province of origin for canoeists was strongly biased toward Ontario and Quebec. The top decile group for canoeing was also strongly oriented towards large urban centres (60.9%), the horseback riding participants being largely rural (69.7%).

More canoeists had dependents or siblings in the 13 to 17 age group in comparison with the horseback riding contingent. The distribution for canoeists and horseback riders was as follows: no children in the 13 to 17 age group, 7.3% and 32%: children in the 13 to 17 age group, 68.2% and 58.1%: no children less than 18 years at home, 24.3% and 9.3%. Those participants in horseback riding had more siblings or dependents in lower age groups than canoeists.

As stated previously, the canoeists' modal income of household head was the $9,000 - $10,499 income category

(19.5%), with the majority in the $7,500 - $14,000 and over bracket. The modal income of the household heads for horseback riders was the $6,000 - $7,499 income category (18.6%) with the majority being in the $7,499 and under income group (51%). Only 11.6% of the household heads for the horseback riding frequency group earned between $12,000 and $14,000 or more. Over twice the number of household heads for canoeing earned an income of $12,000 - $14,000 or more (24.4%).

Canoeing and Sailing

The two water-oriented activities were quite similar in regards to socioeconomic and demographic variables. The sole difference lay in the community size variable. The sailing buffs were almost inclusively centred in large urban areas of 100,000 to 500,000 and over (93.75%). The canoeists, on the other hand were 60.9% urban-oriented (urban centres of 100,000 to 500,000 or more). About 12.1% were strictly rural, and 26.8% were from three community sizes ranging from 1,000 to 100,000.

Hunting and Walking or Hiking

The socioeconomic and demographic comparisons between the two activities of hunting and walking or hiking produced ten dissimilarities. The ten dissimilarities were apparent in community size, sex of respondent, total number in household, children less than five at home, children 5 to 12 at home, children 13 to 17 at home, total number of children in household, marital status, occupation of

respondent and age group of respondent.

The domographic differences were: community size, sex of respondent, marital status and age group of respondent. As stated previously, hunters were primarily rural/small-community oriented (63.4%) with walking or hiking enthusiasts being strongly oriented toward large urban centres (60.4%). Hunters were predominantly male (97.5%) compared with a male - female ratio of 45.6% - 54.3% for walking or hiking. About 56% of the hunting frequency group were single, 41.4% married and 2.4% widowed, divorced or separated. The walking or hiking top decile had 41.6% single, 46.9% married and 11.4% widowed, divorced or separated. There were less single, more married and more widowed, divorced or separated persons in the walking or hiking activity group. The modal age group for walkers or hikers was 35 to 39 years (38.2%) with almost 50% of these participants in the 35 to 49 year age category. The modal age category for the top decile in hunting was 12 to 14 years (29.2%) with 48% of this subsample between 10 and 19 years.

The family cycle variables which caused proportional dissimilarities were: total number in household, children less than 5 years at home, children 5 to 12 years at home, children 13 to 17 years at home and total number of children in household. As mentioned previously, 38.2% of the walking or hiking subgroup had one or two in the household, with 28.1% having three or four members, 23.4% with five or six members and 10.06% possessing a household size of 7 to 10 or more. The modal family size for walking or hiking was two (26.1%).

Hunters on the other hand had a modal value of four or six (tied with 24.3% each) in the household. The distribution of total household size for hunting was 7.3% (one or two), 34.1% (three or four), five or six (41.4%) and 17.0% (7 to 10 or more).

Of the walking or hiking enthusiasts who had children under the age of 18 (44.2% did not), 18.1% indicated that they had children under the age of five years, 32.2% stated that their children ranged in age from five to twelve years and 30.8% had children in the thirteen to seventeen age bracket. Approximately 19.5% of the hunting frequency group did not have any children residing at home under 18 years. The proportion of children in each age category for hunting was: under five years, 29.2%: five to twelve years, 60.9%: thirteen to seventeen years, 51.2%.

The "total number of children in household" variable portrayed the smaller family sizes of the walking or hiking subgroup in comparison with the hunting frequency subgroup. The modal value for the number of children in household within walking or hiking was none (44.2%). The modal value for hunting was three (24.3%) with only 19.5% indicating no children. Therefore differences occurred between the top decile of hunting and walking or hiking in size of household, total number of children and their age categories.

The sole socioeconomic variable which was significant was the "occupation of respondent." The distribution for walking or hiking as stated previously was strongly homemaker-oriented (46.9%): white collar participants accounted for

7.8%: blue collar walkers or hikers, 14% and students 26.12%. The distribution for hunters was: homemaker, 2.4%: white collar workers, 4.8%: blue collar workers, 34.1%, students, 46.34%. The primary differences between the two activity groups were within the homemaker, blue collar worker and student categories.

Hunting and Horseback Riding

The sex of respondent and age group of respondent were the two differences which occurred between the top decile activity groups of hunting and horseback riding. Hunters were characterized by a male dominance (97.5%); the male - female ratio for horseback riders was 58.1% male, 43.9% female. Participants in horseback riding tended to be grouped in the younger age categories. About 80.4% of the top decile participants within horseback riding were between the ages of 10 to 15 years, compared with 36.5% of the top decile group within hunting. A large group of hunting enthusiasts (37.1%) were between 30 and 49 years of age in comparison to 6.9% for horseback riding participants.

Hunting and Sailing

Hunting and sailing frequency groups had six variables which differed between them. These variables included community size, sex of respondent, total number in household, occupation of respondent, income group of head of household and observed socioeconomic level.

Hunting was predominantly male-oriented (97.5%). Community size was characterized as being largely rural

(63.4%). Medium to large family sizes were in the main with the primary occupation being largely student (46.34%) with a minority of blue collar workers (34.13%). The majority of the heads of households in hunting earned under $7,499 and had a lower-middle to middle class orientation.

Sailing was characterized by a male - female ratio of 62.5% to 37.5%. The sailing buffs were largely urban-oriented (93.75%) and possessed smaller family sizes. The majority were students (62.5%) and the majority of heads of households earned in excess of $7,500. The observed socioeconomic level was predominantly middle class.

Walking or Hiking and Horseback Riding

Nine differences occurred between the socioeconomic and demographic variables of the top decile frequency groups for walking or hiking and horseback riding. These differences were as follows: community size, total number in household, children less than 5 years at home, children 5 to 12 years at home, children 13 to 17 years at home, total number of children in household, marital status, occupation of respondent, and age group of respondent. As the percentage distributions for the socioeconomic and demographic variables have been mentioned many times previously, only the highlights of the differences will be offered for the remaining three activity combinations.

The demographic variables which displayed unequal proportionality were: community size, marital status and age group of respondent. Those participants in the tenth

decile for horseback riding were, for the most part, rural (69.7%), single (79.0%) and 10 to 15 years of age (60.4%). Walkers or hikers were chiefly from large urban centres (60.4%), with 41.6% being single and 46.9% married. The age distribution was heavily skewed toward the 30 to 49 year age group (52.3%).

The family cycle variables showed a smaller household size for walking or hiking. The walking or hiking subgroup had a propensity toward total household sizes of 5 or less (81.8%) compared with horseback riding which displayed a tendency toward total household sizes of five or more (69.7%). The majority of the walking or hiking subgroup had no children under 18 years of age (44.2% versus 9.3% for the activity horseback riding). This value accounted for the major differences in the three age category of children variables. Of those within both top decile groups who had children or siblings within the three age categories, the proportions were generally similar. Those minority participants in walking or hiking tended to have smaller families with fewer children than the horseback riding subgroup.

The "occupation of respondent" variable was the sole variable which was significantly different. There were proportionally more students within the horseback riding subgroup than in the tenth decile for walking or hiking. The walking or hiking enthusiasts possessed more participants in the homemaker category.

Walking or Hiking and Sailing

The major differences encountered between the

minority/heavy-users in walking or hiking and sailing occurred in the community size, marital status, occupation of respondent and income of head of household variables.

Sailing enthusiasts were generally characterized by being exclusively urban (93.75%), primarily single (81.25%) with an occupation category of student (62.5%). These participants were chiefly in the 10 to 15 year old class (56.25%) with the heads of households earning in excess of $9,000 (62.5%).

The tenth decile walkers and hikers were less urbanized (60.4%) with more participants originating from smaller urban communities (21.47%). About 18% were rural. A majority were married (46.9%) with a modal occupation category of homemaker (38.2%), followed by student class (28.8%). A majority within the top decile of walking or hiking were older than the majority of the tenth decile within sailing (30 to 49 year category accounted for 52.3%), with the heads of households chiefly earning less than $8,999.

Horseback Riding and Sailing

Only two significant differences were apparent between the top decile frequency groups of horseback riding and sailing. These differences were within the community size and total number in household variables.

The minority/heavy-users in horseback riding were particularly rural. The sailing participants were exclusively from large urban centres. The sailing frequency group had a majority with household sizes of one to three persons (56.25%)

with 4 to 5 persons accounting for 31.25% of the total sub-sample. Those sailing enthusiasts with total family sizes of greater than six were in the minority. The top decile for horseback riding had total household sizes of 4 to 5 in the main with sizes of 6 to 10 or more accounting for 32.55% of the total. Smaller household sizes of one to three accounted for only 16.23% of the total horseback riding sub-sample.

Summary

Table 50 summarizes the results of the testing of hypothesis three. Eight two-activity combinations were significant with seven two-activity combinations being non-significant. Given a level of significance of .05, in order to accept hypothesis three, 14 out of the 15 two-activity combinations would have to be significant. Hypothesis three was not upheld as only eight of fifteen two-activity combinations were significant.

The two-activity combinations in which a significant difference arose were: trailer camping and canoeing, trailer camping and horseback riding, canoeing and hunting, canoeing and horseback riding, hunting and walking or hiking, hunting and sailing, walking or hiking and horseback riding (refer to Table 52). The activity combinations which were not significant were: trailer camping and hunting, trailer camping and walking or hiking, trailer camping and sailing, canoeing and sailing, hunting and horseback riding, walking or hiking and sailing and horseback riding and sailing.

TABLE 52

A SUMMARY OF THE RESULTS OF THE TESTING OF THE THIRD HYPOTHESIS: DIFFERENCES BETWEEN FIFTEEN TWO-ACTIVITY COMBINATIONS OF SIX MINORITY/HEAVY-USER GROUPS USING THREE COLLAPSED SOCIOECONOMIC AND DEMOGRAPHIC VARIABLES (DEMOGRAPHIC, FAMILY CYCLE AND SOCIOECONOMIC)

ACTIVITY COMBINATIONS	VARIABLES WHICH DIFFERED BETWEEN ACTIVITIES	SIGNIFICANT OR NOT SIGNIFICANT
1. Trailer Camping and Canoeing	D [Age Group (.05); Marital Status (.001); Province of Interview (.05)] FC [Children < 5 Years (.01); Children 13 - 17 Years (.01)] SE [Occupation (.05)]	Significant
2. Trailer Camping and Hunting	D [Community Size (.001); Sex (.001)] SE [Occupation (.001); Income (.05)]	Not Significant (No Differences between Family Cycle Variables)
3. Trailer Camping and Walking or Hiking	FC [Total Number in Household (.05); Total Number of Children (.01)] SE [Income (.05)]	Not Significant (No Differences between Demographic Variables)
4. Trailer Camping and Horseback Riding	D [Age Group (.001); Community Size (.001)] FC [Children < 5 Years (.01); Total Number of Children (.05)] SE [Occupation (.01)]	Significant

TABLE 52 (Cont'd)

ACTIVITY COMBINATIONS	VARIABLES WHICH DIFFERED BETWEEN ACTIVITIES	SIGNIFICANT OR NOT SIGNIFICANT
5. Trailer Camping and Sailing	D [Community Size (.05) Marital Status (.01) SE [Income Group (.05)	Not Significant (No Differences between Family Cycle Variables)
6. Canoeing and Hunting	D [Province of Interview (.05) Community Size (.001) Sex (.001) FC [Children < 5 Years (.05) Children 13 - 17 Years (.05) SE [Education (.05) Income (.01) Observed Socioeconomic Level (.01)	Significant
7. Canoeing and Walking or Hiking	D [Province of Interview (.01) Age Group (.001) Sex (.05) Marital Status (.001) FC [Children < 5 Years (.01) Children 13 - 17 Years (.001) SE [Occupation (.001) Income (.01)	Significant
8. Canoeing and Horseback Riding	D [Province of Interview (.01) Community Size (.001) FC [Children 13 - 17 Years (.01)	Significant

TABLE 52 (Cont'd)

ACTIVITY COMBINATIONS	VARIABLES WHICH DIFFERED BETWEEN ACTIVITIES	SIGNIFICANT OR NOT SIGNIFICANT
	SE [Income (.05)	
9. Canoeing and Sailing	D [Community Size (.05)	Not Significant (No Differences between either Family Cycle or Socioeconomic Variables)
10. Hunting and Walking or Hiking	D [Age Group (.01) Community Size (.001) Sex (.001) Marital Status (.01)	Significant
	FC [Total Number in Household (.001) Children < 5 Years (.01) Children 5 - 12 Years (.05) Children 13 - 17 Years (.01) Total Number of Children (.05)	
	SE [Occupation (.001)	
11. Hunting and Horseback Riding	D [Sex (.001) Age Group (.05)	Not Significant (No Differences between Family Cycle or Socioeconomic Variables)
12. Hunting and Sailing	D [Community Size (.001) Sex (.001)	Significant
	FC [Total Number in Household (.01)	

TABLE 52 (Cont'd)

ACTIVITY COMBINATIONS	VARIABLES WHICH DIFFERED BETWEEN ACTIVITIES	SIGNIFICANT OR NOT SIGNIFICANT
	SE [Income (.01) Occupation (.05) Observed Socioeconomic Level (.05)	
13. Walking or Hiking and Horseback Riding	D [Age Group (.001) Community Size (.001) Marital Status (.001)	Significant
	FC [Total Number in Household (.001) Children < 5 Years (.001) Children 5 - 12 Years (.001) Children 13 - 17 Years (.001) Total Number of Children (.001)	
	SE [Occupation (.001)	
14. Walking or Hiking and Sailing	D [Community Size (.05) Marital Status (.01) Age Group (.001)	Not Significant (No Differences between Family Cycle Variables)
	SE [Occupation (.05) Income (.01)	
15. Horseback Riding and Sailing	D [Community Size (.001)	Not Significant (No Differences between Socio-economic Variables)
	FC [Total Number in Household (.001)	

CHAPTER 6

SUMMARY AND CONCLUSIONS

It was the purpose of this study: (a) to analyze the extent to which certain subaggregate groups of sampled outdoor recreation participants account for total participation in each of eighteen outdoor recreational activities; (b) to determine if these subaggregate groups within each outdoor recreation activity possess distinctive socioeconomic and demographic characteristics and (c) to ascertain if subaggregate group characteristics vary between activities according to socioeconomic and demographic characteristics.

The disaggregation of each of the eighteen outdoor recreation activities resulted in the formation of two distinct groups: a minority group who accounted for a majority of the total outdoor recreation participation and, inversely, a majority group who accounted for a minority of the total outdoor recreation participation. This was true for six of the outdoor recreation activities: trailer camping, hunting, canoeing, walking or hiking, horseback riding and sailing. Of the twelve remaining activities, nine activities displayed a definite trend toward the minority/heavy-user hypothesis.

It was also found that subaggregate user groups within activities did not possess distinctive socioeconomic and demographic characteristics. Six activities (trailer camping, hunting, canoeing, walking or hiking, horseback riding and

sailing) were analyzed for differences between minority/heavy-user and majority/light-user groups using fourteen socioeconomic and demographic variables. Five of the six within-activity comparisons showed only nominal differences between the two user groups. Walking or hiking was the sole activity in which a significant difference occurred between the minority/heavy-user and majority/light-user groups.

Finally, subaggregate group characteristics did not vary significantly between activities according to socio-economic and demographic characteristics. The six activities examined for within-group differences were further examined for between-group differences. Six minority/heavy-user groups of the six activities (trailer camping, hunting, canoeing, walking or hiking, horseback riding and sailing) were tested for significant differences using fourteen socioeconomic and demographic variables. Fifteen two-activity combinations were significant when using socioeconomic and demographic variables in an explanatory capacity.

The possible implications from the results of this study to future research methodology is offered in the concluding section which follows.

Research and Planning Implications

The major consequence to arise from this study was the general inability of social aggregate variables to explain frequency of participation for six activities. Past research efforts have demonstrated that social aggregate characteristics were useful in explaining or predicting participation and non-participation for various outdoor recreation activities. There may be two possible reasons for the divergent results of this study and past outdoor recreation studies.

Firstly, when analyzing participation or non-participation for certain activities, once the non-participants have been removed from the analysis, the major source of variance disappears. Secondly, differences in social aggregate characteristics between various activities could have been valid at the time they were analyzed or these research studies could have been the result of some random error element. If social aggregate characteristics proved useful in analyzing both participation or non-participation and participation differences between activities, they should also have been instrumental in explaining frequency of participation for this study.

Due to the inability of these social aggregate characteristics in explaining or predicting participation frequency, planners should be wary or cautious of planning studies which depend entirely upon these variables to predict total consumption or demand. Projections based upon measures of participation frequency using socioeconomic and demographic variables may produce estimates of outdoor recreation demand

which are so unreliable that they render useless any estimates of supply facilities.

Therefore a suggestion is made that the present lines of investigation be abandoned or modified and a search for new variables which can better explain or predict outdoor recreation participation be undertaken.

TABLE 4

A LIST OF THE EIGHTEEN OUTDOOR RECREATION ACTIVITIES INDICATING FREQUENCY OF PARTICIPATION, NUMBER OF PARTICIPANTS AND ACTUAL NUMBER OF DERIVED ACTIVITY TRIPS

TRAILER CAMPING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	128	=	128
2		39		78
3		30		90
4		27		108
5		17		85
6		13		78
7		9		63
8		6		48
10		19		190
12		12		144
14		3		42
15		6		90
17		1		17
20		8		160
24		1		24
25		2		50
27		1		27
28		1		28
30		6		180
40		4		160
42		1		42
50		1		50
60		2		120
90		2		180
180		1		180
		Σ x = 340		Σ y = 2,362

TABLE 5

TENT CAMPING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	257	=	257
2		154		308
3		75		225
4		50		200
5		42		210
6		31		186
7		13		91
8		11		88
9		1		9
10		46		460
11		1		11
12		12		144
14		7		98
15		16		240
20		17		340
21		3		63
25		3		75
27		1		27
28		1		28
30		7		210
31		1		31
35		1		35
40		3		120
49		1		49
50		5		250
60		2		120
75		1		75
90		1		90
		$\Sigma x = 763$		$\Sigma y = 4,040$

TABLE 6

PICKUP CAMPING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	43	=	43
2		23		46
3		10		30
4		10		40
5		3		15
6		2		12
7		4		28
8		1		8
9		1		9
10		4		40
12		3		36
15		2		30
20		3		60
21		1		21
25		1		25
30		2		60
40		1		40
42		1		42
		$\Sigma x = 115$		$\Sigma y = 585$

TABLE 7

HUNTING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	92	=	92
2		64		128
3		46		138
4		38		152
5		33		165
6		21		126
7		5		35
8		9		72
10		30		300
11		2		22
12		10		120
14		3		42
15		8		120
20		21		420
23		1		23
24		2		48
25		4		100
29		1		29
30		2		60
40		2		80
50		10		500
52		2		104
60		3		180
75		1		75
80		1		80
100		2		200
104		1		104
200		1		200
300		1		300
		$\Sigma x = 416$		$\Sigma y = 4,015$

TABLE 5

POWER BOATING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	156	=	156
2		145		290
3		80		240
4		42		168
5		61		305
6		56		336
7		14		98
8		10		80
9		3		27
10		65		650
11		1		11
12		27		324
13		2		26
14		3		42
15		18		270
20		45		900
21		1		21
24		2		48
25		13		325
27		1		27
30		28		840
35		1		35
40		8		320
44		1		44
49		1		49
50		19		950
52		1		52
55		1		55
60		7		420
70		1		70
75		3		225
100		10		1,000
120		1		120
200		1		200
		$\Sigma x = 828$		$\Sigma y = 8,716$

TABLE 9

CANOEING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	109	=	109
2		85		170
3		35		105
4		30		120
5		30		150
6		19		114
7		7		49
8		6		48
10		34		340
12		10		120
15		8		120
18		2		36
20		13		260
25		3		75
30		11		330
35		1		35
40		2		80
50		3		150
60		4		240
70		1		70
100		2		200
		$\Sigma x = 415$		$\Sigma y = 2,921$

TABLE 10

SAILING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	53	=	53
2		36		72
3		14		42
4		8		32
5		8		40
6		9		54
8		5		40
10		12		120
12		3		36
13		1		13
14		1		14
15		3		45
16		1		16
20		2		40
24		1		24
30		1		30
40		1		40
50		1		50
75		1		75
100		1		100
		$\Sigma x = 162$		$\Sigma y = 936$

TABLE 11

VISITING HISTORIC SITES

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	436	=	436
2		272		544
3		146		438
4		81		324
5		73		365
6		60		360
7		10		70
8		10		80
9		1		9
10		43		430
11		1		11
12		17		204
14		1		14
15		15		225
18		1		18
20		12		240
21		3		63
22		1		22
23		1		23
25		4		100
30		5		150
35		1		35
40		1		40
50		4		200
60		2		120
200		1		200
		$\Sigma x = 1,202$		$\Sigma y = 4,721$

TABLE 12

DRIVING FOR PLEASURE

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	68	=	68
2		109		218
3		86		258
4		88		352
5		114		570
6		111		666
7		15		105
8		28		224
9		6		54
10		299		2,990
11		6		66
12		134		1,608
13		2		26
14		2		28
15		72		1,080
16		4		64
18		1		18
20		214		4,280
21		5		105
22		1		22
24		20		480
25		91		2,275
26		1		26
28		2		56
30		98		2,940
32		3		96
35		12		420
36		6		216
40		47		1,880
42		1		42
45		5		225
46		1		46
48		1		48
50		212		10,600
52		75		3,900
55		4		220
60		18		1,080
65		2		130
70		6		420
75		11		825
80		3		240

Continued

TABLE 12

DRIVING FOR PLEASURE (Cont'd)

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
96	X	1	=	96
100		61		6,100
101		2		202
102		2		204
104		2		208
115		1		115
125		1		125
130		1		130
144		1		144
150		10		1,500
180		2		360
200		13		2,600
250		1		250
300		18		5,400
350		1		350
365		5		1,825
750		1		750
		$\Sigma x = 2,107$		$\Sigma y = 59,326$

TABLE 13

SIGHTSEEING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	175	=	175
2		143		286
3		78		234
4		70		280
5		76		380
6		66		396
7		16		112
8		20		160
9		5		45
10		124		1,240
11		2		22
12		72		864
13		1		13
14		4		56
15		24		360
16		1		16
20		78		1,560
21		2		42
22		1		22
24		8		192
25		33		825
27		1		27
28		1		28
30		35		1,050
32		1		32
35		5		175
40		15		600
42		1		42
45		1		45
50		70		3,500
52		26		1,352
60		12		720
65		1		65
75		3		225
90		1		90
96		1		96
100		21		2,100
130		1		130
150		5		750
200		5		1,000
300		4		1,200
350		1		350
365		1		365
		Σ x = 1,211		Σ y = 21,222

TABLE 14

SNOWSKIING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	48	=	48
2		31		62
3		29		87
4		18		72
5		11		55
6		17		102
7		3		21
8		3		24
9		1		9
10		31		310
12		15		180
13		1		13
14		1		14
15		16		240
16		2		32
17		2		34
20		27		540
24		1		24
25		6		150
30		19		570
35		2		70
38		1		38
40		2		80
50		6		300
60		3		180
75		2		150
85		1		85
100		2		200
120		1		120
200		1		200
		$\Sigma x = 303$		$\Sigma y = 4,010$

TABLE 15

SNOWMOBILING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	100	=	100
2		86		172
3		67		201
4		46		184
5		53		265
6		34		204
7		3		21
8		9		72
9		2		18
10		86		860
11		1		11
12		16		192
15		34		510
16		1		16
17		1		17
20		53		1,060
22		1		22
23		1		23
24		3		72
25		19		475
26		1		26
30		36		1,080
32		1		32
34		1		34
35		1		35
40		13		520
45		3		135
48		1		48
50		26		1,300
52		1		52
60		9		540
75		3		225
80		1		80
90		1		90
95		1		95
100		16		1,600
104		1		104
110		1		110
128		1		128
144		1		144
150		2		300
200		1		200
400		2		800
		$\Sigma x = 740$		$\Sigma y = 12,173$

TABLE 16

PICNICS OR COOKOUTS

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	197	=	197
2		281		562
3		238		714
4		177		708
5		156		780
6		156		936
7		21		147
8		36		288
9		4		36
10		236		2,360
11		1		11
12		96		1,152
13		2		26
14		4		56
15		65		975
16		6		96
17		2		34
20		77		1,540
21		4		84
23		1		23
24		8		192
25		30		750
30		34		1,020
31		1		31
32		1		32
35		2		70
36		1		36
40		7		280
45		1		45
50		25		1,250
52		2		104
60		4		240
65		1		65
70		1		70
75		4		300
80		1		80
100		3		300
120		1		120
		$\Sigma x = 1,887$		$\Sigma y = 15,710$

TABLE 17

WALKING OR HIKING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	94	=	94
2		147		294
3		103		309
4		86		344
5		94		470
6		84		504
7		21		147
8		21		168
9		2		18
10		168		1,680
12		68		816
13		1		13
14		2		28
15		56		840
16		4		64
18		3		54
20		134		2,680
22		1		22
24		7		168
25		41		1,025
26		1		26
30		64		1,920
35		4		140
36		4		144
40		17		680
45		1		45
48		1		48
50		84		4,200
52		30		1,560
55		1		55
60		10		600
65		1		65
70		3		210
75		3		225
80		2		160
90		2		180
96		1		96
100		50		5,000
104		1		104
130		1		130
144		1		144
150		6		900

Continued

TABLE 17

WALKING OR HIKING (Cont'd)

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
156	X	2	=	312
160		2		320
175		1		175
180		2		360
183		1		183
200		19		3,800
240		2		480
250		2		500
280		1		280
300		14		4,200
340		1		340
350		1		350
356		1		356
360		2		720
365		19		6,935
366		1		366
		Σ x = 1,496		Σ y = 46,047

TABLE 18

ICE SKATING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	88	=	88
2		113		226
3		66		198
4		45		180
5		73		365
6		48		288
7		13		91
8		18		144
9		3		27
10		113		1,130
11		2		22
12		33		396
13		1		13
14		2		28
15		57		855
16		1		16
17		1		17
18		3		54
20		83		1,660
21		1		21
22		1		22
24		4		96
25		44		1,100
26		1		26
27		1		27
30		61		1,830
32		1		32
35		6		210
36		5		180
40		28		1,120
45		3		135
48		4		192
50		69		3,450
52		2		104
55		3		165
60		12		720
64		1		64
65		2		130

Continued

TABLE 18

ICE SKATING (Cont'd)

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
70	X	3	=	210
75		11		825
80		2		160
90		3		270
96		1		96
100		30		3,000
101		1		101
125		4		500
150		4		600
180		1		180
200		5		1,000
250		2		500
275		1		275
300		2		600
500		2		1,000
		Σ x = 1,084		Σ y = 24,739

TABLE 19

HORSEBACK RIDING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	141	=	141
2		72		144
3		43		129
4		22		88
5		24		120
6		16		96
7		5		35
8		1		8
9		3		27
10		35		350
12		9		108
14		2		28
15		8		120
18		1		18
20		14		280
21		1		21
24		2		48
25		2		50
30		3		90
40		2		80
50		10		500
60		2		120
72		1		72
75		1		75
79		1		79
80		1		80
100		5		500
125		2		250
150		3		450
160		1		160
180		1		180
200		1		200
300		3		900
500		1		500
		$\Sigma x = 439$		$\Sigma y = 6,047$

TABLE 20

BICYCLING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	44	=	44
2		80		160
3		44		132
4		46		184
5		63		315
6		29		174
7		6		42
8		12		96
9		1		9
10		115		1,150
11		1		11
12		34		408
13		1		13
15		37		555
17		1		17
18		1		18
20		78		1,560
21		1		21
24		2		48
25		35		875
28		2		56
30		66		1,980
32		2		64
35		4		140
36		2		72
40		30		1,200
50		96		4,800
52		3		156
60		31		1,860
64		1		64
65		2		130
70		7		490
75		10		750
80		5		400
90		15		1,350
96		1		96
100		95		9,500
101		2		202
110		1		110
112		1		112
115		1		115
120		4		480

Continued

TABLE 20

BICYCLING (Cont'd)

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
125	X	3	=	375
130		2		260
150		23		3,450
170		1		170
175		1		175
180		3		540
200		30		6,000
250		8		2,000
300		20		6,000
350		2		700
360		2		720
365		9		3,285
370		1		370
500		2		1,000
600		1		600
		$\Sigma x = 1,120$		$\Sigma y = 55,604$

TABLE 21

FISHING

Frequency		Number of Individuals (x)		Number of Activity Trips (y)
1	X	154	=	154
2		155		310
3		135		405
4		78		312
5		88		440
6		64		384
7		19		133
8		14		112
9		5		45
10		124		1,240
11		1		11
12		36		432
13		2		26
14		4		56
15		31		465
16		4		64
17		1		17
18		2		36
20		59		1,180
21		1		21
22		1		22
24		4		96
25		22		550
27		1		27
30		36		1,080
35		2		70
36		1		36
40		9		360
45		1		45
49		1		49
50		23		1,150
52		3		156
60		6		360
64		1		64
75		3		225
80		2		160
100		12		1,200
120		1		120
121		1		121
125		1		125
200		1		200
203		1		203
		Σ x = 1,110		Σ y = 12,262

TABLE 22

THE SEGMENTING OF PARTICIPANTS INTO DECILE GROUPS FOR EIGHTEEN OUTDOOR RECREATION ACTIVITIES

TRAILER CAMPING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	34	34	1.43	
2	34	34	1.43	2.86
3	34	34	1.43	4.29
4	34	42	1.77	6.06
5	34	71	3.00	9.06
6	34	109	4.61	13.67
7	34	150	6.35	20.02
8	34	234	9.90	29.92
9	34	391	16.55	46.47
10	34	1,262	53.42	99.89
100	340	2,362	99.89	

TABLE 23

TENT CAMPING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	76	76	1.88	
2	76	76	1.88	3.76
3	76	76	1.88	5.64
4	76	126	3.12	8.76
5	76	152	3.76	12.52
6	76	200	4.95	17.47
7	76	277	6.86	24.33
8	76	414	10.25	34.58
9	76	717	17.76	52.34
10	76	1,923	47.63	99.97
100	760	4,037	99.97	

TABLE 24

PICKUP CAMPING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	11	11	1.89	
2	11	11	1.89	3.78
3	11	11	1.89	5.67
4	11	17	2.93	8.60
5	11	22	3.79	12.39
6	11	27	4.65	17.04
7	11	39	6.72	23.76
8	11	57	9.82	33.58
9	11	107	18.44	52.02
10	11	278	47.90	99.92
100	110	580	99.92	

TABLE 25

HUNTING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	41	41	1.02	
2	41	41	1.02	2.04
3	41	78	1.94	3.98
4	41	96	2.39	6.37
5	41	132	3.29	9.66
6	41	176	4.39	14.05
7	41	225	5.61	19.66
8	41	373	9.30	28.96
9	41	624	15.56	44.52
10	41	2,223	55.45	99.97
100	410	4,009	99.97	

TABLE 26

POWER BOATING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	82	82	0.94	
2	82	98	1.12	2.02
3	82	164	1.88	3.90
4	82	199	2.28	6.18
5	82	283	3.24	9.42
6	82	421	4.83	14.25
7	82	595	6.82	21.07
8	82	889	10.19	31.16
9	82	1,635	18.75	50.01
10	82	4,350	49.90	99.91
100	820	8,716	99.91	

TABLE 27

CANOEING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	41	41	1.40	
2	41	41	1.40	2.80
3	41	60	2.05	4.85
4	41	82	2.81	7.66
5	41	98	3.36	11.02
6	41	145	4.97	15.99
7	41	200	6.85	22.84
8	41	313	10.73	33.57
9	41	478	16.39	49.96
10	41	1,458	50.00	99.96
100	410	2,916	99.96	

TABLE 28

SAILING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	16	16	1.71	
2	16	16	1.71	3.42
3	16	16	1.71	5.13
4	16	29	3.10	8.23
5	16	32	3.42	11.65
6	16	41	4.38	16.03
7	16	62	6.63	22.66
8	16	95	10.17	32.83
9	16	156	16.70	49.53
10	16	471	50.42	99.95
100	160	934	99.95	

TABLE 29

VISIT HISTORIC SITES

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	120	120	2.54	
2	120	120	2.54	5.08
3	120	120	2.54	7.62
4	120	166	3.51	11.13
5	120	240	5.08	16.21
6	120	254	5.38	21.59
7	120	360	7.62	29.21
8	120	495	10.48	39.69
9	120	692	14.66	54.35
10	120	2,152	45.60	99.95
100	1,200	4,719	99.95	

TABLE 30

DRIVING FOR PLEASURE

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	210	399	0.67	
2	210	870	1.46	2.13
3	210	1,359	2.29	4.42
4	210	2,100	3.54	7.96
5	210	2,360	3.98	11.94
6	210	3,740	6.30	18.24
7	210	4,748	8.00	26.24
8	210	7,669	12.93	39.17
9	210	10,564	17.81	56.98
10	210	25,510	43.00	99.98
100	2,100	59,319	99.98	

TABLE 31

SIGHTSEEING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	121	121	0.57	
2	121	189	0.89	1.46
3	121	288	1.35	2.81
4	121	471	2.22	5.03
5	121	669	3.15	8.18
6	121	1,109	5.22	13.40
7	121	1,359	6.40	19.80
8	121	2,323	10.94	30.74
9	121	4,299	20.25	50.99
10	121	10,393	48.97	99.96
100	1,210	21,221	99.96	

TABLE 32

SNOWSKIING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	30	30	0.74	
2	30	45	1.12	1.86
3	30	74	1.84	3.70
4	30	105	2.62	6.32
5	30	163	4.06	10.38
6	30	280	6.98	17.36
7	30	357	8.90	26.26
8	30	526	13.12	39.38
9	30	734	18.31	57.69
10	30	1,693	42.25	99.94
100	300	4,007	99.94	

TABLE 33

SNOWMOBILING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	74	74	0.60	
2	74	122	1.00	1.60
3	74	184	1.51	3.11
4	74	265	2.17	5.28
5	74	385	3.16	8.44
6	74	647	5.31	13.75
7	74	848	6.96	20.71
8	74	1,378	11.32	32.03
9	74	2,199	18.06	50.09
10	74	6,071	49.87	99.96
100	740	12,173	99.96	

TABLE 34

PICNICS OR COOKOUTS

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	188	188	1.19	
2	188	374	2.38	3.57
3	188	469	2.98	6.55
4	188	607	3.86	10.41
5	188	806	5.13	15.54
6	188	1,026	6.53	22.07
7	188	1,461	9.30	31.37
8	188	1,897	12.08	43.45
9	188	2,663	16.95	60.40
10	188	6,212	39.55	99.95
100	1,880	15,703	99.95	

TABLE 35

WALKING OR HIKING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	149	210	0.45	
2	149	361	0.78	1.23
3	149	579	1.25	2.48
4	149	823	1.78	4.26
5	149	1,359	2.95	7.21
6	149	1,682	3.65	10.86
7	149	2,723	5.91	16.77
8	149	3,821	8.29	25.06
9	149	7,172	15.57	40.63
10	149	27,311	59.31	99.94
100	1,490	46,041	99.94	

TABLE 36

ICE SKATING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	108	132	0.53	
2	108	235	0.99	1.52
3	108	401	1.62	3.14
4	108	594	2.40	5.54
5	108	1,011	4.08	9.62
6	108	1,329	5.37	14.99
7	108	2,032	8.21	23.20
8	108	2,942	11.89	35.09
9	108	4,759	19.23	54.32
10	108	11,300	45.68	100.00
100	1,080	24,735	100.00	

TABLE 37

HORSEBACK RIDING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	43	43	0.71	
2	43	43	0.71	1.42
3	43	43	0.71	2.13
4	43	83	1.37	3.50
5	43	97	1.60	5.10
6	43	140	2.31	7.41
7	43	212	3.51	10.92
8	43	378	6.26	17.18
9	43	644	10.66	27.84
10	43	4,355	72.12	99.96
100	430	6,038	99.96	

TABLE 38

BICYCLING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	112	180	0.32	
2	112	390	0.70	1.02
3	112	696	1.25	2.27
4	112	1,135	2.04	4.31
5	112	1,827	3.29	7.60
6	112	2,830	5.09	12.69
7	112	4,636	8.33	21.02
8	112	6,660	11.98	33.00
9	112	11,125	20.00	53.00
10	112	26,125	46.98	99.98
100	1,120	55,604	99.98	

TABLE 39

FISHING

Decile Number	Number of Participants in Deciles	Actual Frequency in Activity Trips	% of Total Frequency for Each Decile	Cumulative Frequency
1	111	111	0.90	
2	111	179	1.46	2.36
3	111	246	2.00	4.36
4	111	333	2.71	7.07
5	111	477	3.89	10.96
6	111	611	4.98	15.94
7	111	988	8.06	24.00
8	111	1,250	10.19	34.19
9	111	2,191	17.86	52.05
10	111	5,876	47.92	99.97
100	1,110	12,262	99.97	

TABLE 43

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR TRAILER CAMPING

SAMPLE SIZE: (x) Top Decile - 34
(y) Bottom Deciles - 306

VAR001 = PROVINCE OF INTERVIEW

VALUE LABEL		TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	2	5.9%	2	0.7%
2	Prince Edward Island	0	0.0%	0	0.0%
3	Nova Scotia	0	0.0%	8	2.6%
4	New Brunswick	0	0.0%	5	1.6%
5	Quebec	11	32.4%	84	27.5%
6	Ontario	8	23.5%	94	30.7%
7	Manitoba	5	14.7%	18	5.9%
8	Saskatchewan	2	5.9%	17	5.6%
9	Alberta	4	11.8%	37	12.1%
10	British Columbia	2	5.9%	41	13.4%
	TOTAL	34	100.0%	306	100.0%

VAR002 = COMMUNITY SIZE

VALUE LABEL		TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	12	35.3%	78	25.5%
2	100,000 - 500,000	7	20.6%	69	22.5%
3	30,000 - 100,000	4	11.8%	20	6.5%
4	10,000 - 30,000	3	8.8%	21	6.9%
5	1,000 - 10,000	3	8.8%	43	14.1%
6	Rural	5	14.7%	75	24.5%
	TOTAL	34	100.0%	306	100.0%

TABLE 43 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Male	19	55.9%	153	50.0%
2	Female	15	44.1%	153	50.0%
	TOTAL	34	100.0%	306	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	One	1	2.9%	7	2.3%
2	Two	5	14.7%	40	13.1%
3	Three	5	14.7%	49	16.0%
4	Four	9	26.5%	58	19.0%
5	Five	1	2.9%	66	21.6%
6	Six	7	20.6%	43	14.1%
7	Seven	4	11.8%	26	8.5%
8	Eight	1	2.9%	13	4.2%
9	Nine	1	2.9%	3	1.0%
10	Ten or More	0	0.0%	1	0.3%
11	None	0	0.0%	0	0.0%
	TOTAL	34	100.0%	306	100.0%

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	13	38.2%	153	50.0%
1	Yes	11	32.4%	81	26.5%
3	No Children 18	10	29.4%	72	23.5%
	TOTAL	34	100.0%	306	100.0%

TABLE 43 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	7	20.6%	72	23.5%
1	Yes	17	50.0%	162	52.9%
3	No Children 18	10	29.4%	72	23.5%
	TOTAL	34	100.0%	306	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	11	32.4%	100	32.7%
1	Yes	13	38.2%	134	43.8%
3	No Children 18	10	29.4%	72	23.5%
	TOTAL	34	100.0%	306	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	None	10	29.4%	72	23.5%
1	One	4	11.8%	48	15.7%
2	Two	7	20.6%	67	21.9%
3	Three	1	2.9%	60	19.6%
4	Four	7	20.6%	37	12.1%
5	Five	3	8.8%	16	5.2%
6	Six	1	2.9%	5	1.6%
7	Seven	1	2.9%	1	0.3%
8	Eight	0	0.0%	0	0.0%
9	Nine	0	0.0%	0	0.0%
	TOTAL	34	100.0%	306	100.0%

TABLE 43 (Cont'd)

VAR009 = MARITAL STATUS

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	11	32.4%	133	43.5%
2	Married	22	64.7%	160	52.3%
3	Widowed, Divorced, Separated	1	2.9%	13	4.2%
	TOTAL	34	100.0%	306	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	2	5.9%	10	3.3%
2	Executive, Manager, Owner	1	2.9%	6	2.0%
3	Sales	1	2.9%	4	1.3%
4	Clerical, Other White Collar Worker	2	5.9%	11	3.6%
5	Skilled Labour	4	11.8%	43	14.1%
6	Unskilled Labour	1	2.9%	6	2.0%
7	Farmer	0	0.0%	2	0.7%
8	Homemaker Only	11	32.4%	82	26.8%
9	Retired, Pensioned	0	0.0%	5	1.6%
10	Homemaker Working Part Time	1	2.9%	5	1.6%
11	Homemaker Working Full Time	1	2.9%	17	5.6%
12	Student	9	26.5%	107	35.0%
13	Unemployed, Refused	1	2.9%	8	2.6%
	TOTAL	34	100.0%	306	100.0%

TABLE 43 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused	0	0.0%	2	0.7%
1	Some Public School	7	20.6%	67	21.9%
2	Finished Public School	4	11.8%	26	8.5%
3	Some High School	9	26.5%	105	34.3%
4	Finished High School	11	32.4%	44	14.4%
5	Some Technological or Senior College	0	0.0%	26	8.5%
6	Finished Technological or Senior College	1	2.9%	10	3.3%
7	Some University	1	2.9%	16	5.2%
8	Graduated University	1	2.9%	10	3.3%
	TOTAL	34	100.0%	306	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	1	2.9%	31	10.1%
2	12 to 14 Years	5	14.7%	45	14.7%
3	15 Years Old	1	2.9%	11	3.6%
4	16 to 17 Years	2	5.9%	9	2.9%
5	18 to 19 Years	1	2.9%	16	5.2%
6	20 Years Old	1	2.9%	6	2.0%
7	21 to 24 Years	3	8.8%	19	6.2%
8	25 to 29 Years	3	8.8%	31	10.1%
9	30 to 34 Years	2	5.9%	37	12.1%
10	35 to 39 Years	10	29.4%	61	19.9%
11	40 to 44 Years	3	8.8%	21	6.9%
12	45 to 49 Years	2	5.9%	19	6.2%
	TOTAL	34	100.0%	306	100.0%

TABLE 43 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	3	8.8%	19	6.2%
1	Less Than $2,999	1	2.9%	16	5.2%
2	$3,000 - $4,499	0	0.0%	12	3.9%
3	$4,500 - $5,999	4	11.8%	30	9.8%
4	$6,000 - $7,499	5	14.7%	50	16.3%
5	$7,500 - $8,999	6	17.6%	50	16.3%
6	$9,000 - $10,499	9	26.5%	44	14.4%
7	$10,500 - $11,999	2	5.9%	37	12.1%
8	$12,000 - $13,999	3	8.8%	19	6.2%
9	$14,000 or More	1	2.9%	21	6.9%
10	Don't Know & No Est.	0	0.0%	8	2.6%
	TOTAL	34	100.0%	306	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	0	0.0%	8	2.6%
2		1	2.9%	11	3.6%
3	Lower Middle	3	8.8%	23	7.5%
4		8	23.5%	55	18.0%
5	Middle	13	38.2%	115	37.6%
6		4	11.8%	56	18.3%
7	Upper Middle	4	11.8%	28	9.2%
8		1	2.9%	10	3.3%
9	Upper	0	0.0%	0	0.0%
	TOTAL	34	100.0%	306	100.0%

TABLE 44

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR CANOEING

SAMPLE SIZE: (x) Top Decile - 41
(y) Bottom Deciles - 369

VAR001 = PROVINCE OF INTERVIEW

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	0	0.0%	0	0.0%
2	Prince Edward Island	0	0.0%	0	0.0%
3	Nova Scotia	1	2.4%	4	1.1%
4	New Brunswick	0	0.0%	4	1.1%
5	Quebec	12	29.3%	122	33.1%
6	Ontario	23	56.1%	140	37.9%
7	Manitoba	2	4.9%	28	7.6%
8	Saskatchewan	2	4.9%	13	3.5%
9	Alberta	0	0.0%	20	5.4%
10	British Columbia	1	2.4%	38	10.3%
	TOTAL	41	100.0%	369	100.0%

VAR002 = COMMUNITY SIZE

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	17	41.5%	137	37.2%
2	100,000 - 500,000	8	19.5%	77	20.9%
3	30,000 - 100,000	5	12.2%	26	7.0%
4	10,000 - 30,000	3	7.3%	24	6.5%
5	1,000 - 10,000	3	7.3%	31	8.4%
6	Rural	5	12.2%	74	20.1%
	TOTAL	41	100.0%	369	100.0%

TABLE 44 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Male	27	65.9%	220	59.6%
2	Female	14	34.1%	149	40.4%
	TOTAL	41	100.0%	369	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	One	1	2.4%	18	4.9%
2	Two	8	19.5%	34	9.2%
3	Three	3	7.3%	50	13.6%
4	Four	6	14.6%	89	24.1%
5	Five	11	26.8%	73	19.8%
6	Six	6	14.6%	44	11.9%
7	Seven	2	4.9%	32	8.7%
8	Eight	1	2.4%	13	3.5%
9	Nine	1	2.4%	9	2.4%
10	Ten or More	2	4.9%	7	1.9%
11	None	0	0.0%	0	0.0%
	TOTAL	41	100.0%	369	100.0%

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	28	68.3%	214	58.0%
1	Yes	3	7.3%	69	18.7%
3	No Children 18	10	24.4%	86	23.3%
	TOTAL	41	100.0%	369	100.0%

TABLE 44 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	11	26.8%	95	25.7%
1	Yes	20	48.8%	188	50.9%
3	No Children 18	10	24.4%	86	23.3%
	TOTAL	41	100.0%	369	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	3	7.3%	91	24.7%
1	Yes	28	68.3%	192	52.0%
3	No Children 18	10	24.4%	86	23.3%
	TOTAL	41	100.0%	369	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	None	10	24.4%	87	23.6%
1	One	8	19.5%	63	17.1%
2	Two	5	12.2%	88	23.8%
3	Three	11	26.8%	58	15.7%
4	Four	4	9.8%	36	9.8%
5	Five	1	2.4%	26	7.0%
6	Six	1	2.4%	6	1.6%
7	Seven	1	2.4%	2	0.5%
8	Eight	0	0.0%	2	0.5%
9	Nine	0	0.0%	1	0.3%
	TOTAL	41	100.0%	369	100.0%

TABLE 44 (Cont'd)

VAR009 = MARITAL STATUS

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	31	75.6%	252	68.3%
2	Married	10	24.4%	105	28.5%
3	Widowed, Divorced, Separated	0	0.0%	12	3.3%
	TOTAL	41	100.0%	369	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	1	2.4%	19	5.2%
2	Executive, Manager, Owner	1	2.4%	11	3.0%
3	Sales	1	2.4%	3	0.8%
4	Clerical, Other White Collar Worker	0	0.0%	10	2.7%
5	Skilled Labour	6	14.6%	46	12.5%
6	Unskilled Labour	0	0.0%	16	4.3%
7	Farmer	1	2.4%	2	0.5%
8	Homemaker Only	5	12.2%	46	12.5%
9	Retired, Pensioned	0	0.0%	1	0.3%
10	Homemaker Working Part Time	0	0.0%	3	0.8%
11	Homemaker Working Full Time	1	2.4%	17	4.6%
12	Student	24	58.5%	188	50.9%
13	Unemployed, Refused	1	2.4%	7	1.9%
	TOTAL	41	100.0%	369	100.0%

TABLE 44 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused	0	0.0%	2	0.5%
1	Some Public School	9	22.0%	81	22.0%
2	Finished Public School	1	2.4%	20	5.4%
3	Some High School	15	36.6%	138	37.4%
4	Finished High School	3	7.3%	51	13.8%
5	Some Technological or Senior College	2	4.9%	15	4.1%
6	Finished Technological or Senior College	3	7.3%	15	4.1%
7	Some University	5	12.2%	19	5.1%
8	Graduated University	3	7.3%	28	7.6%
	TOTAL	41	100.0%	369	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	3	7.3%	46	12.5%
2	12 to 14 Years	12	29.3%	69	18.7%
3	15 Years Old	2	4.9%	19	5.1%
4	16 to 17 Years	2	4.9%	31	8.4%
5	18 to 19 Years	6	14.6%	42	11.4%
6	20 Years Old	2	4.9%	9	2.4%
7	21 to 24 Years	4	9.8%	45	12.2%
8	25 to 29 Years	0	0.0%	28	7.6%
9	30 to 34 Years	2	4.9%	25	6.8%
10	35 to 39 Years	3	7.3%	36	9.8%
11	40 to 44 Years	1	2.4%	7	1.9%
12	45 to 49 Years	4	9.8%	12	3.3%
	TOTAL	41	100.0%	369	100.0%

TABLE 44 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	4	9.8%	27	7.3%
1	Less Than $2,999	3	7.3%	21	5.7%
2	$3,000 - $4,499	1	2.4%	17	4.6%
3	$4,500 - $5,999	0	0.0%	50	13.6%
4	$6,000 - $7,499	3	7.3%	52	14.1%
5	$7,500 - $8,999	7	17.1%	58	15.7%
6	$9,000 - $10,499	8	19.5%	49	13.3%
7	$10,500 - $11,999	4	9.8%	27	7.3%
8	$12,000 - $13,999	6	14.6%	21	5.7%
9	$14,000 or More	4	9.8%	36	9.8%
10	Don't Know & No Est.	1	2.4%	11	3.0%
	TOTAL	41	100.0%	369	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	0	0.0%	9	2.5%
2		3	7.3%	24	6.5%
3	Lower Middle	2	4.9%	31	8.4%
4		6	14.6%	73	19.8%
5	Middle	8	19.5%	104	28.2%
6		12	29.3%	60	16.3%
7	Upper Middle	8	19.5%	43	11.7%
8		2	4.9%	20	5.4%
9	Upper	0	0.0%	5	1.4%
	TOTAL	41	100.0%	369	100.0%

TABLE 45

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR HUNTING

SAMPLE SIZE: (x) Top Decile - 41
(y) Bottom Deciles - 369

VAR001 = PROVINCE OF INTERVIEW

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	2	4.9%	13	3.5%
2	Prince Edward Island	0	0.0%	1	0.3%
3	Nova Scotia	1	2.4%	22	6.0%
4	New Brunswick	1	2.4%	13	3.5%
5	Quebec	9	22.0%	110	29.8%
6	Ontario	13	31.7%	101	27.8%
7	Manitoba	2	4.9%	17	4.6%
8	Saskatchewan	8	19.5%	18	4.9%
9	Alberta	2	4.9%	24	6.5%
10	British Columbia	3	7.3%	50	13.6%
	TOTAL	41	100.0%	369	100.0%

VAR002 = COMMUNITY SIZE

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	2	4.9%	52	14.1%
2	100,000 - 500,000	4	9.8%	55	14.9%
3	30,000 - 100,000	3	7.3%	33	8.9%
4	10,000 - 30,000	6	14.6%	35	9.5%
5	1,000 - 10,000	5	12.2%	43	11.7%
6	Rural	21	51.2%	151	40.9%
	TOTAL	41	100.0%	369	100.0%

TABLE 45 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Male	40	97.6%	313	84.8%
2	Female	1	2.4%	56	15.2%
	TOTAL	41	100.0%	369	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	One	1	2.4%	17	4.6%
2	Two	2	4.9%	55	14.9%
3	Three	4	9.8%	61	16.5%
4	Four	10	24.4%	72	19.5%
5	Five	7	17.1%	46	12.5%
6	Six	10	24.4%	47	12.7%
7	Seven	2	4.9%	37	10.0%
8	Eight	3	7.3%	17	4.6%
9	Nine	0	0.0%	9	2.4%
10	Ten or More	2	4.9%	8	2.2%
11	None	0	0.0%	0	0.0%
	TOTAL	41	100.0%	369	

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	21	51.2%	174	47.2%
1	Yes	12	29.3%	82	22.2%
3	No Children 18	8	19.5%	113	30.6%
	TOTAL	41	100.0%	369	100.0%

TABLE 45 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 No	8	19.5%	78	21.1%
1 Yes	25	61.0%	178	48.2%
3 No Children 18	8	19.5%	113	30.6%
TOTAL	41	100.0%	369	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 No	12	29.3%	98	26.6%
1 Yes	21	51.2%	158	42.8%
3 No Children 18	8	19.5%	113	30.6%
TOTAL	41	100.0%	369	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 None	8	19.5%	113	30.6%
1 One	4	9.8%	61	16.5%
2 Two	7	17.1%	68	18.4%
3 Three	10	24.4%	51	13.8%
4 Four	8	19.5%	29	7.9%
5 Five	2	4.9%	27	7.3%
6 Six	1	2.4%	12	3.3%
7 Seven	0	0.0%	5	1.4%
8 Eight	0	0.0%	2	0.5%
9 Nine	1	2.4%	1	0.3%
TOTAL	41	100.0%	369	100.0%

TABLE 45 (Cont'd)

VAR009 = MARITAL STATUS

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	23	56.1%	206	55.8%
2	Married	17	41.5%	151	40.9%
3	Widowed, Divorced, Separated	1	2.4%	12	3.3%
	TOTAL	41	100.0%	369	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	0	0.0%	6	1.6%
2	Executive, Manager, Owner	2	4.9%	17	4.6%
3	Sales	0	0.0%	6	1.6%
4	Clerical, Other White Collar Worker	0	0.0%	14	3.8%
5	Skilled Labour	9	22.9%	81	22.0%
6	Unskilled Labour	3	7.3%	34	9.2%
7	Farmer	2	4.9%	18	4.9%
8	Homemaker Only	1	2.4%	28	7.6%
9	Retired, Pensioned	2	4.9%	15	4.1%
10	Homemaker Working Part Time	0	0.0%	3	0.8%
11	Homemaker Working Full Time	0	0.0%	4	1.1%
12	Student	19	46.3%	139	37.7%
13	Unemployed, Refused	3	7.3%	4	1.1%
	TOTAL	41	100.0%	369	100.0%

TABLE 45 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILE Raw Data	BOTTOM DECILE Percent
0	Refused	1	2.4%	1	0.3%
1	Some Public School	11	26.8%	76	20.6%
2	Finished Public School	3	7.3%	27	7.3%
3	Some High School	20	48.8%	169	45.8%
4	Finished High School	3	7.3%	40	10.8%
5	Some Technological or Senior College	2	4.9%	18	4.9%
6	Finished Technological or Senior College	0	0.0%	14	3.8%
7	Some University	0	0.0%	12	3.3%
8	Graduated University	1	2.4%	12	3.3%
	TOTAL	41	100.0%	369	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	2	4.9%	33	8.9%
2	12 to 14 Years	12	29.3%	53	14.4%
3	15 Years Old	1	2.4%	17	4.6%
4	16 to 17 Years	2	4.9%	22	6.0%
5	18 to 19 Years	3	7.3%	33	8.9%
6	20 Years Old	2	4.9%	11	3.0%
7	21 to 24 Years	1	2.4%	41	11.1%
8	25 to 29 Years	5	12.2%	36	9.8%
9	30 to 34 Years	4	9.8%	20	5.4%
10	35 to 39 Years	8	19.5%	67	18.2%
11	40 to 44 Years	1	2.4%	14	3.8%
12	45 to 49 Years	0	0.0%	22	6.0%
	TOTAL	41	100.0%	369	100.0%

TABLE 45 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	1	2.4%	22	6.0%
1	Less Than $2,999	4	9.8%	30	8.1%
2	$3,000 - $4,499	3	7.3%	29	7.9%
3	$4,500 - $5,999	10	24.4%	38	10.3%
4	$6,000 - $7,499	9	22.0%	65	17.6%
5	$7,500 - $8,999	6	14.6%	74	20.1%
6	$9,000 - $10,499	3	7.3%	44	11.9%
7	$10,500 - $11,999	2	4.9%	30	8.1%
8	$12,000 - $13,999	1	2.4%	21	5.7%
9	$14,000 or More	2	4.9%	13	3.5%
10	Don't Know & No Est.	0	0.0%	3	0.8%
	TOTAL	41	100.0%	369	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	1	2.4%	6	1.6%
2		3	7.3%	24	6.5%
3	Lower Middle	8	19.5%	43	11.7%
4		12	29.3%	75	20.3%
5	Middle	13	31.7%	125	33.9%
6		3	7.3%	57	15.4%
7	Upper Middle	1	2.4%	24	6.5%
8		0	0.0%	12	3.3%
9	Upper	0	0.0%	3	0.8%
	TOTAL	41	100.0%	369	100.0%

TABLE 46

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR WALKING OR HIKING

SAMPLE SIZE: (x) Top Decile - 149
(y) Bottom Deciles - 1,341

VAR001 = PROVINCE OF INTERVIEW

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	4	2.7%	20	1.5%
2	Prince Edward Island	0	0.0%	1	0.1%
3	Nova Scotia	6	4.0%	44	3.3%
4	New Brunswick	1	0.7%	24	1.8%
5	Quebec	44	29.5%	452	33.7%
6	Ontario	41	27.5%	436	32.5%
7	Manitoba	10	6.7%	72	5.4%
8	Saskatchewan	7	4.7%	55	4.1%
9	Alberta	7	4.7%	88	6.6%
10	British Columbia	29	19.5%	149	11.1%
	TOTAL	149	100.0%	1,341	100.0%

VAR002 = COMMUNITY SIZE

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	58	38.9%	452	33.7%
2	100,000 - 500,000	32	21.5%	278	20.7%
3	30,000 - 100,000	5	3.4%	101	7.5%
4	10,000 - 30,000	13	8.7%	92	6.9%
5	1,000 - 10,000	14	9.4%	140	10.4%
6	Rural	27	18.1%	278	20.7%
	TOTAL	149	100.0%	1,341	100.0%

TABLE 46 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Male	68	45.6%	657	49.0%
2	Female	81	54.4%	684	51.0%
	TOTAL	149	100.0%	1,341	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	One	18	12.1%	61	4.5%
2	Two	39	26.2%	203	15.1%
3	Three	19	12.8%	201	15.0%
4	Four	23	15.4%	271	20.2%
5	Five	23	15.4%	225	16.8%
6	Six	12	8.1%	178	13.3%
7	Seven	9	6.0%	105	7.8%
8	Eight	3	2.0%	48	3.6%
9	Nine	1	0.7%	19	1.4%
10	Ten or More	2	1.3%	30	2.2%
11	None	0	0.0%	0	0.0%
	TOTAL	149	100.0%	1,341	100.0%

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	56	37.6%	676	50.4%
1	Yes	27	18.1%	291	21.7%
3	No Children 18	66	44.3%	374	27.9%
	TOTAL	149	100.0%	1,341	100.0%

TABLE 46 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 No	35	23.5%	321	23.9%
1 Yes	48	32.2%	646	48.2%
3 No Children .18	66	44.3%	374	27.9%
TOTAL	149	100.0%	1,341	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 No	37	24.8%	348	26.0%
1 Yes	46	30.9%	619	46.2%
3 No Children 18	66	44.3%	374	27.9%
TOTAL	149	100.0%	1,341	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 None	66	44.3%	376	28.0%
1 One	27	18.1%	226	16.9%
2 Two	17	11.4%	286	21.3%
3 Three	22	14.8%	200	14.9%
4 Four	10	6.7%	141	10.5%
5 Five	5	3.4%	75	5.6%
6 Six	0	0.0%	20	1.5%
7 Seven	2	1.3%	8	0.6%
8 Eight	0	0.0%	7	0.5%
9 Nine	0	0.0%	2	0.1%
TOTAL	149	100.0%	1,341	100.0%

TABLE 46 (Cont'd)

VAR009 = MARITAL STATUS

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	62	41.6%	734	54.7%
2	Married	70	47.0%	540	40.3%
3	Widowed, Divorced, Separated	17	11.4%	67	5.0%
	TOTAL	149	100.0%	1,341	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	2	1.3%	46	3.4%
2	Executive, Manager, Owner	6	4.0%	31	2.3%
3	Sales	2	1.3%	17	1.3%
4	Clerical, Other White Collar Worker	5	3.4%	52	3.9%
5	Skilled Labour	15	10.1%	116	8.7%
6	Unskilled Labour	4	2.7%	43	3.2%
7	Farmer	2	1.3%	10	0.7%
8	Homemaker Only	42	28.2%	291	21.7%
9	Retired, Pensioned	13	8.7%	41	3.1%
10	Homemaker Working Part Time	4	2.7%	27	2.0%
11	Homemaker Working Full Time	11	7.4%	79	5.9%
12	Student	39	26.2%	565	42.1%
13	Unemployed, Refused	4	2.7%	23	1.7%
	TOTAL	149	100.0%	1,341	100.0%

TABLE 46 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused	2	1.3%	6	0.4%
1	Some Public School	22	14.8%	329	24.5%
2	Finished Public School	14	9.4%	87	6.5%
3	Some High School	62	41.6%	460	34.3%
4	Finished High School	25	16.3%	172	12.8%
5	Some Technological or Senior College	6	4.0%	66	4.9%
6	Finished Technological or Senior College	3	2.0%	71	5.3%
7	Some University	11	7.4%	74	5.5%
8	Graduated University	4	2.7%	76	5.7%
	TOTAL	149	100.0%	1,341	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	7	4.7%	146	10.9%
2	12 to 14 Years	12	8.1%	223	16.6%
3	15 Years Old	3	2.0%	53	4.0%
4	16 to 17 Years	5	3.4%	76	5.7%
5	18 to 19 Years	16	10.7%	97	7.2%
6	20 Years Old	2	1.3%	29	2.2%
7	21 to 24 Years	12	8.1%	120	8.9%
8	25 to 29 Years	14	9.4%	127	9.5%
9	30 to 34 Years	5	3.4%	84	6.3%
10	35 to 39 Years	57	38.3%	258	19.2%
11	40 to 44 Years	6	4.0%	66	4.9%
12	45 to 49 Years	10	6.7%	62	4.6%
	TOTAL	149	100.0%	1,341	100.0%

TABLE 46 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	8	5.4%	75	5.6%
1	Less Than $2,999	22	14.8%	114	8.5%
2	$3,000 - $4,499	11	7.4%	75	5.6%
3	$4,500 - $5,999	29	19.5%	152	11.3%
4	$6,000 - $7,499	15	10.1%	209	15.6%
5	$7,500 - $8,999	16	10.7%	215	16.0%
6	$9,000 - $10,499	18	12.1%	174	13.0%
7	$10,500 - $11,499	10	6.7%	100	7.5%
8	$12,000 - $13,999	6	4.0%	81	6.0%
9	$14,000 or More	13	8.7%	115	8.6%
10	Don't Know & No Est.	1	0.7%	31	2.3%
	TOTAL	149	100.0%	1,341	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	4	2.7%	29	2.2%
2		14	9.4%	60	4.5%
3	Lower Middle	17	11.4%	154	11.5%
4		26	17.4%	254	18.9%
5	Middle	52	34.9%	426	31.8%
6		18	12.1%	216	16.1%
7	Upper Middle	11	7.4%	113	8.4%
8		4	2.7%	74	5.5%
9	Upper	3	2.0%	15	1.1%
	TOTAL	149	100.0%	1,341	100.0%

TABLE 47

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR HORSEBACK RIDING

SAMPLE SIZE: (x) Top Decile - 43
(y) Bottom Deciles - 387

VAR001 = PROVINCE OF INTERVIEW

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	2	4.7%	1	0.3%
2	Prince Edward Island	0	0.0%	0	0.0%
3	Nova Scotia	2	4.7%	9	2.3%
4	New Brunswick	1	2.3%	4	1.0%
5	Quebec	5	11.6%	114	29.5%
6	Ontario	16	37.2%	136	35.1%
7	Manitoba	3	7.0%	23	5.9%
8	Saskatchewan	4	9.3%	17	4.4%
9	Alberta	3	7.0%	31	8.0%
10	British Columbia	7	16.3%	52	13.4%
	TOTAL	43	100.0%	387	100.0%

VAR002 = COMMUNITY SIZE

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	3	7.0%	140	36.2%
2	100,000 - 500,000	5	11.6%	71	18.3%
3	30,000 - 100,000	0	0.0%	21	5.4%
4	10,000 - 30,000	2	4.7%	19	4.9%
5	1,000 - 10,000	3	7.0%	30	7.8%
6	Rural	30	69.8%	106	27.4%
	TOTAL	43	100.0%	387	100.0%

TABLE 47 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Male	25	58.1%	218	56.3%
2	Female	18	41.9%	169	43.7%
	TOTAL	43	100.0%	387	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	One	0	0.0%	9	2.3%
2	Two	1	2.3%	30	7.8%
3	Three	6	14.0%	54	14.0%
4	Four	6	14.0%	71	18.3%
5	Five	16	37.2%	85	22.0%
6	Six	8	18.6%	54	14.0%
7	Seven	2	4.7%	50	12.9%
8	Eight	1	2.3%	24	6.2%
9	Nine	0	0.0%	4	1.0%
10	Ten or More	3	7.0%	6	1.6%
11	None	0	0.0%	0	0.0%
	TOTAL	43	100.0%	387	100.0%

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	31	72.1%	230	59.4%
1	Yes	8	18.6%	80	20.7%
3	No Children 18	4	9.3%	77	19.9%
	TOTAL	43	100.0%	387	100.0%

TABLE 47 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	12	27.9%	96	24.8%
1	Yes	27	62.8%	214	55.3%
3	No Children 18	4	9.3%	77	19.9%
	TOTAL	43	100.0%	387	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	No	14	32.6%	93	24.0%
1	Yes	25	58.1%	217	56.1%
3	No Children 18	4	9.3%	77	19.9%
	TOTAL	43	100.0%	387	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	None	5	11.6%	77	19.9%
1	One	5	11.6%	62	16.0%
2	Two	12	27.9%	88	22.7%
3	Three	10	23.3%	63	16.3%
4	Four	6	14.0%	45	11.6%
5	Five	2	4.7%	41	10.6%
6	Six	1	2.3%	9	2.3%
7	Seven	0	0.0%	2	0.5%
8	Eight	0	0.0%	0	0.0%
9	Nine	2	4.7%	0	0.0%
	TOTAL	43	100.0%	387	100.0%

TABLE 47 (Cont'd)

VAR009 = MARITAL STATUS

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	34	79.1%	306	79.1%
2	Married	8	18.6%	73	18.9%
3	Widowed, Divorced, Separated	1	2.3%	8	2.1%
	TOTAL	43	100.0%	387	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	0	0.0%	10	2.6%
2	Executive, Manager, Owner	1	2.3%	5	1.3%
3	Sales	0	0.0%	7	1.8%
4	Clerical, Other White Collar Worker	1	2.3%	22	5.7%
5	Skilled Labour	2	4.7%	29	7.5%
6	Unskilled Labour	2	4.7%	16	4.1%
7	Farmer	1	2.3%	6	1.6%
8	Homemaker Only	2	4.7%	28	7.2%
9	Retired, Pensioned	0	0.0%	1	0.3%
10	Homemaker Working Part Time	2	4.7%	5	1.3%
11	Homemaker Working Full Time	2	4.7%	14	3.6%
12	Student	30	69.8%	232	59.9%
13	Unemployed, Refused	0	0.0%	12	3.1%
	TOTAL	43	100.0%	387	100.0%

TABLE 47 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused	0	0.0%	2	0.5%
1	Some Public School	12	27.9%	112	28.9%
2	Finished Public School	2	4.7%	13	3.4%
3	Some High School	16	37.2%	150	38.8%
4	Finished High School	8	18.6%	41	10.6%
5	Some Technological or Senior College	2	4.7%	23	5.9%
6	Finished Technological or Senior College	1	2.3%	16	4.1%
7	Some University	2	4.7%	10	2.6%
8	Graduated University	0	0.0%	20	5.2%
	TOTAL	43	100.0%	387	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	10	23.3%	51	13.2%
2	12 to 14 Years	13	30.2%	98	25.3%
3	15 Years Old	3	7.0%	27	7.0%
4	16 to 17 Years	3	7.0%	30	7.8%
5	18 to 19 Years	3	7.0%	49	12.7%
6	20 Years Old	0	0.0%	11	2.8%
7	21 to 24 Years	6	14.0%	45	11.6%
8	25 to 29 Years	2	4.7%	28	7.2%
9	30 to 34 Years	2	4.7%	16	4.1%
10	35 to 39 Years	1	2.3%	16	4.1%
11	40 to 44 Years	0	0.0%	9	2.3%
12	45 to 49 Years	0	0.0%	7	1.8%
	TOTAL	43	100.0%	387	100.0%

TABLE 47 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	1	2.3%	24	6.2%
1	Less Than $2,999	2	4.7%	26	6.7%
2	$3,000 - $4,499	5	11.6%	19	4.9%
3	$4,500 - $5,999	7	16.3%	55	14.2%
4	$6,000 - $7,499	8	18.6%	48	12.4%
5	$7,500 - $8,999	4	9.3%	67	17.3%
6	$9,000 - $10,499	6	14.0%	49	12.7%
7	$10,500 - $11,999	1	2.3%	28	7.2%
8	$12,000 - $13,999	1	2.3%	28	7.2%
9	$14,000 or More	4	9.3%	31	8.0%
10	Don't Know & No Est.	4	9.3%	12	3.1%
	TOTAL	43	100.0%	387	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	1	2.3%	5	1.3%
2		4	9.3%	19	4.9%
3	Lower Middle	4	9.3%	58	15.0%
4		10	23.3%	74	19.1%
5	Middle	12	27.9%	125	32.3%
6		6	14.0%	64	16.5%
7	Upper Middle	2	4.7%	21	5.4%
8		4	9.3%	17	4.4%
9	Upper	0	0.0%	4	1.0%
	TOTAL	43	100.0%	387	100.0%

TABLE 48

CONVERSION OF RAW FREQUENCIES FOR BOTH THE TOP DECILE AND BOTTOM DECILES INTO PERCENT DISTRIBUTIONS FOR SAILING

SAMPLE SIZE: (x) Top Decile - 16
(y) Bottom Deciles - 144

VAR001 = PROVINCE OF INTERVIEW

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Newfoundland	0	0.0%	0	0.0%
2	Prince Edward Island	0	0.0%	0	0.0%
3	Nova Scotia	2	12.5%	9	6.3%
4	New Brunswick	0	0.0%	1	0.7%
5	Quebec	3	18.8%	33	22.9%
6	Ontario	9	56.3%	61	42.4%
7	Manitoba	0	0.0%	7	4.9%
8	Saskatchewan	0	0.0%	5	3.5%
9	Alberta	0	0.0%	3	2.1%
10	British Columbia	2	12.5%	25	17.4%
	TOTAL	16	100.0%	144	100.0%

VAR002 = COMMUNITY SIZE

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Over 500,000	12	75.0%	78	54.2%
2	100,000 - 500,000	3	18.8%	26	18.1%
3	30,000 - 100,000	0	0.0%	6	4.2%
4	10,000 - 30,000	0	0.0%	11	7.6%
5	1,000 - 10,000	0	0.0%	7	4.9%
6	Rural	1	6.3%	16	11.1%
	TOTAL	16	100.0%	144	100.0%

TABLE 48 (Cont'd)

VAR003 = SEX OF RESPONDENT

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1 Male	10	62.5%	76	52.8%
2 Female	6	37.5%	68	47.2%
TOTAL	16	100.0%	144	100.0%

VAR004 = TOTAL NUMBER IN HOUSEHOLD

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1 One	2	12.5%	7	4.9%
2 Two	3	18.8%	19	13.2%
3 Three	4	25.0%	29	20.1%
4 Four	1	6.3%	27	18.8%
5 Five	4	25.0%	31	21.5%
6 Six	1	6.3%	19	13.2%
7 Seven	0	0.0%	8	5.6%
8 Eight	1	6.3%	3	2.1%
9 Nine	0	0.0%	0	0.0%
10 Ten or More	0	0.0%	1	0.7%
11 None	0	0.0%	0	0.0%
TOTAL	16	100.0%	144	100.0%

VAR005 = ARE THERE CHILDREN < 5 AT HOME?

VALUE LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0 No	11	68.8%	76	52.8%
1 Yes	1	6.3%	28	19.4%
3 No Children 18	4	25.0%	40	27.8%
TOTAL	16	100.0%	144	100.0%

TABLE 48 (Cont'd)

VAR006 = ARE THERE CHILDREN 5 TO 12 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILE Raw Data	BOTTOM DECILE Percent
0	No	7	43.8%	42	29.2%
1	Yes	5	31.3%	62	43.1%
3	No Children 18	4	25.0%	40	27.8%
	TOTAL	16	100.0%	144	100.0%

VAR007 = ARE THERE CHILDREN 13 TO 17 AT HOME?

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILE Raw Data	BOTTOM DECILE Percent
0	No	3	18.8%	41	28.5%
1	Yes	9	56.3%	63	43.8%
3	No Children 18	4	25.0%	40	27.8%
	TOTAL	16	100.0%	144	100.0%

VAR008 = TOTAL NUMBER OF CHILDREN < 18 AT HOME

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILE Raw Data	BOTTOM DECILE Percent
0	None	4	25.0%	40	27.8%
1	One	6	37.5%	31	21.5%
2	Two	2	12.5%	28	19.4%
3	Three	2	12.5%	23	16.0%
4	Four	1	6.3%	18	12.5%
5	Five	1	6.3%	3	2.1%
6	Six	0	0.0%	1	0.7%
7	Seven	0	0.0%	0	0.0%
8	Eight	0	0.0%	0	0.0%
9	Nine	0	0.0%	0	0.0%
	TOTAL	16	100.0%	144	100.0%

TABLE 48 (Cont'd)

VAR009 = MARITAL STATUS

VALUE LABEL		TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Single	13	81.3%	86	59.7%
2	Married	3	18.8%	51	35.4%
3	Widowed, Divorced, Separated	0	0.0%	7	4.9%
	TOTAL	16	100.0%	144	100.0%

VAR010 = OCCUPATION OF RESPONDENT

VALUE LABEL		TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Professional	1	6.3%	9	6.3%
2	Executive, Manager, Owner	0	0.0%	7	4.9%
3	Sales	1	6.3%	3	2.1%
4	Clerical, Other White Collar Worker	0	0.0%	7	4.9%
5	Skilled Labour	0	0.0%	12	8.3%
6	Unskilled Labour	0	0.0%	3	2.1%
7	Farmer	0	0.0%	0	0.0%
8	Homemaker Only	2	12.5%	26	18.1%
9	Retired, Pensioned	0	0.0%	1	0.7%
10	Homemaker Working Part Time	0	0.0%	3	2.1%
11	Homemaker Working Full Time	2	12.5%	5	3.5%
12	Student	10	62.5%	66	45.8%
13	Unemployed, Refused	0	0.0%	2	1.4%
	TOTAL	16	100.0%	144	100.0%

TABLE 48 (Cont'd)

VAR011 = LEVEL OF SCHOOLING REACHED

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused	0	0.0%	0	0.0%
1	Some Public School	4	25.0%	25	17.4%
2	Finished Public School	1	6.3%	6	4.2%
3	Some High School	5	31.3%	43	29.9%
4	Finished High School	3	18.8%	17	11.8%
5	Some Technological or Senior College	0	0.0%	8	5.6%
6	Finished Technological or Senior College	0	0.0%	10	6.9%
7	Some University	1	6.3%	19	13.2%
8	Graduated University	2	12.5%	16	11.1%
	TOTAL	16	100.0%	144	100.0%

VAR012 = AGE GROUP OF RESPONDENT

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	10 to 11 Years	2	12.5%	15	10.4%
2	12 to 14 Years	6	17.5%	20	13.9%
3	15 Years Old	1	6.3%	7	4.9%
4	16 to 17 Years	0	0.0%	8	5.6%
5	18 to 19 Years	1	6.3%	16	11.1%
6	20 Years Old	0	0.0%	6	4.2%
7	21 to 24 Years	2	12.5%	16	11.1%
8	25 to 29 Years	1	6.3%	18	12.5%
9	30 to 34 Years	1	6.3%	15	10.4%
10	35 to 39 Years	1	6.3%	15	10.4%
11	40 to 44 Years	1	6.3%	5	3.5%
12	45 to 49 Years	0	0.0%	3	2.1%
	TOTAL	16	100.0%	144	100.0%

TABLE 48 (Cont'd)

VAR013 = INCOME GROUP OF HEAD OF HOUSEHOLD

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
0	Refused & No Estimate	3	18.8%	12	8.3%
1	Less Than $2,999	1	6.3%	5	3.5%
2	$3,000 - $4,499	0	0.0%	4	2.8%
3	$4,500 - $5,999	1	6.3%	10	6.9%
4	$6,000 - $7,499	1	6.3%	16	11.1%
5	$7,500 - $8,999	0	0.0%	12	8.3%
6	$9,000 - $10,499	3	18.8%	25	17.4%
7	$10,500 - $11,999	1	6.3%	8	5.6%
8	$12,000 - $13,999	1	6.3%	16	11.1%
9	$14,000 or More	5	31.3%	31	21.5%
10	Don't Know & No Est.	0	0.0%	5	3.5%
	TOTAL	16	100.0%	144	100.0%

VAR014 = OBSERVED SOCIOECONOMIC LEVEL

VALUE	LABEL	TOP DECILE Raw Data	TOP DECILE Percent	BOTTOM DECILES Raw Data	BOTTOM DECILES Percent
1	Lower	0	0.0%	4	2.8%
2		2	12.5%	2	1.4%
3	Lower Middle	1	6.3%	8	5.6%
4		1	6.3%	18	12.5%
5	Middle	4	25.0%	43	29.9%
6		5	31.3%	29	20.1%
7	Upper Middle	2	12.5%	14	9.7%
8		1	6.3%	21	14.6%
9	Upper	0	0.0%	5	3.5%
	TOTAL	16	100.0%	144	100.0%

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